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chaperonin großL -
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Rajandream, M.A.; Ros Nature 393, 537-544,

Rogers, 44, 1998

J.; Rutter, S.; Seeger, K.; Skelton, S.; Squares, S.

Holroyd, S

genome

A; Accession: A70830

C;Genetics: A;Gene: groEL2; C;Superfamily:

groEL2;

chaperonin großL RV0440

R;Thole, J.E.R., Keulen, W.J.; Kolk, A.H.J.; Groothuis, D.G.; Berwald, L.G.; Tiesjema, I Infect. Immun. 55, 1466-1475, 1987
A;Title: Characterization, sequence determination, and immunogenicity of a 64-kilodaltor A;Reference number: A43509; MUID:87193155; PMID:3553003

65K antigen mbah - Mycobacterium bovis C;Species: Mycobacterium bovis C;Date: 28-Oct-1992 #sequence_revision 28-Oct-1992 #text_change 26-Aug-1999

A;Status: preliminary; nucleic acid sequence not shown; translation not shown
A;Molecule type; DNA
A;Residues: 1-540 <COL>
A;Cross-references: GB:ALO21932; GB:AL123456; NID:g3261527; PIDN:CAA17397.1; PID:g29095:A;Experimental source: strain H37Rv

A;Authors: Sqares, R.; Sulston, J.E.; Taylor, K.; Whitehead, S.; Barrell, B.G. A;Title: Deciphering the biology of Mycobacterium tuberculosis from the complete A;Reference number: A70500; MUID:98295987; PMID:9634230

RESULT A43509

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31 μ 22;

52 22

GPKGRNVVLEKKWGAPTITNDG GRKGRNVVLEKKWGAPTITNDG

Matches Query Match Best Local (

Similarity 100. 22; Conservative

100.0%;

Score 122; DB 2; Pred. No. 9.1e-11;

Length 540; Indels

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Mismatches

0

0,

Gaps

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C; Accession: A43509
R; Thole, J.E.R.; Key

A;Accession: A43509

RESULT 1 A26950 RYCOBEL protein - Mycobacterium tuberculosis (strain H37RV) N;Alternate names: 65K antigen C;Species: Mycobacterium tuberculosis C;Date: 02-Jun-1988 #sequence revision 02-Jun-1988 #text_change C;Accession: AA6950; A70830 R;Shinnick, T.M; J. Bacteriol. 169, 1080-1088, 1987 J. Bacteriol. 169, 1080-1088, 1987 A;Title: The 65-kilodalton antigen of Mycobacterium tuberculosis A;Reference number: A26950; MUID:87137260; PMID:3029018 A;Accession: A26950 A;Accession: GSHIN-AAA88232.1; PID		33333333333333333333333333333333333333	
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RESULT 1 AZ6950 GroEL2 protein - Mycobacterium tuberculosis (strain H37RV) N,Alternate names: 65K antigen C;Species: Mycobacterium tuberculosis C;pate: 02-Jun-1988 #sequence_revision 02-Jun-1988 #text_change 20-J C;Accession: AZ6950; A70830 R;Shinnick, T.M; J. Bacteriol. 169, 1080-1088, 1987	ALIGNMENTS	heat shock prote: groEL protein - 1 60 KD chaperonin, 60 kl chaperonin, 60 kl chaperonin, 60 kl chaperonin groEL chaperonin groEL chaperonin grote: heat shock prote: heat shock protein groEL protein protein groEL groEL protein - 1 groEL protein [in 60K heat shock po chaperonin groEL	
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N;Alternate names: heat shock protein groEL homolog 2
C;Species: Streptomyces albus
C;Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change
C;Accession: C41325
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C;Species: Mycobacterium paratuberculosis
C;Species: Mycobacterium paratuberculosis
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 26-Aug-1999
C;Accession: S40245
R;Colston, X:Y.Z.; McConnell, X:Y.Z.; Bujdoso, R.
submitted to the EMBL Data Library, August 1993
A;Description: Cloning and expression of Mycobacterium paratuberculosis HSP65KD.
chaperonin 60K [imported] - Mycobacterium leprae
N;Alternate names: heat shock protein GroEL-2
                                                                                                                                                                S
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A;Residues: 1-541 <COL>
A;Cross-references: EMBL:X74518; NID:g438180; PIDN:CAA52630.1; PID:g438181
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A;Residues: 1-540 <MAZ>
A;Cross-references: GB:M76658; NID:g153293; PIDN:AAA26754.1; PID:g153294
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J. Bacteriol. 173, 7382-7386, 1991
A;Title: Characterization of the groEL-like genes in Streptomyces
A;Reference number: A41325; MUID:92041639; PMID:1682304
A;Accession: C41325
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A;Residues: 1-540 <THO>
A;Cross-references: GB:M17705; NID:g149933; PIDN:AAA25358.1; PID:g149934
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A; Molecule type: DNA
A; Residues: 1-588 < MEH>
C; Superfamily: | chaneron
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A;Reference number: Z22831
A;Accession. Takana
                                                                                                                 A;Molecule type: DNA
A;Residues: 1-538 <ARN>
A;Cross-references: GB:AE001727; GB:AE000512; NID:g4981015; PIDN:AAD35591.1;
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                                                                                                                                                                                                   Nature 399, 323-329, 1999

A;Title: Evidence for lateral gene transfer between Archaea and ***noference number: A72200; MUID:99287316; PMID:10360571
                                                                                                                                                                                                                                                                                                                           groEL protein | Thermotoga maritima (strain MSB8)
C;Species: Thermotoga maritima
C;Date: 11-Jun-1999 #sequence_revision 11-Jun-1999 #text_change 21-Ju1-2000
C;Accession: H72367
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C;Superfamily: chaperonin groEL
C;Keywords: molecular chaperone
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C;Date: 21-Jan-2000 #sequence_revision 21-Jan-2000 #text_change
C;Accession: T44725
R;James, K.D.; Parkhill, J.; Barrell, B.G.; Rajandream, M.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Reference number: A; Accession: A25902
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A;Experimental source: cosmid B1450
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A; Residues: 1-541 < JAM>
                                                                                             A; Experimental
                                                                                                                                                                         A;Status: preliminary
                                                                                                                                                                                                                                                                                           Garrett, M.M.;
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                                     chaperonin großL
                                                                                               source: strain
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01-JAN-1988 (Rel. 06, Created)

01-OCT-1996 (Rel. 34, Last sequence update)

15-SEP-2003 (Rel. 42, Last amnotation update)

60 kDa chaperonin 2 (Protein Copin60-2) (GroEL protein 2)

antigen) (Heat shock protein 65) (Cell wall protein A) (GROL2 OR GROEL2 OR GROEL2 OR HSP65 OR RV0440 OR MT0456
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                                                                                                                                                                                                                                                                                                             Chaperone;
                                                                                                                                                                                                                                                                                                                                                               InterPro; IPR001844; Chaprnin Cpn
InterPro; IPR002423; Cpn60/TCP-1.
Pfam; PF00118; cpn60_TCP1; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   conditions (By similarity).
SUBUNIT: Oligomer of 14 subunits composed
7 subunits (By similarity).
SUBCELLULAR LOCATION: Cytoplasmic (By simi
SIMILARITY: Belongs to the chaperonin (HSF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SWISS-PROT entry is copyright. It is produced through a collaboration een the Swiss Institute of Bioinformatics and the EMBL outstation
                                                                                                                                                                                       ¥
                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                     GPKGRNVVLEKKWGAPTITNDG
                                                                                                                                                                                                                                                                                                               ATP-binding.
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42, Last annotation update)
(Protein Cpn60) (groEL prot
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Tsukamurellaceae; Tsukamurella
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Gordon S.V., Biglmeier K., Gas S., Barry C.E. III, Tekaia F.,
Badcock K., Basham D., Brown D., Chillingworth T., Connor R.,
Davies R., Devlin K., Feltwell T., Gentles S., Hamlin N., Holroyd
Hornsby T., Jagels K., Krogh A., McLean J., Moule S., Murphy L.,
Oliver S., Osborne J., Quail M.A., Rajandream M.A., Rogers J.,
Rutter S., Seeger K., Skelton S., Squares S., Squares R.,
Sulston J.E., Taylor K., Whitehead S., Barrell B.G.;
"Deciphering the biology of Mycobacterium tuberculosis from the
complete genome sequence.";
Nature 393:537-544(1998).
                                                                                                                                                                  SPECIES-Mituberculosis;
SPECIES-MItuberculosis;
MEDLINE-95214306; PubMed-7699930;
MEDLINE-95214306; PubMed-7699930;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SPECIES=M.bovis; STRAIN=BCG;
MEDLINE=87193155; PubMed=3553003;
Thole J.E.R., Keulen W.J., Kolk A.H.J., Groothuis
Tiesgjema R.H., van Embden J.D.A.;
"Characterization, sequence determination, and im
64-kilodalton protein of Mycobacterium bovis BCG
Escherichia coli K-12.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE OF 63-182 FROM N.A.
SPECIES-M.bovis, and M.tuberculosis;
MEDLINE-95150784; PubMed-7848059;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SPECIES-M tuberculosis; STRAIN-CDC 1551 / Oshkosh; Pleischmann R.D., Alland D., Bisen J.A., Carpenter L., White O., Pleischmann R.D., Hickey E., Peterson J., DeBoy R., Dodson R., Gwinn M.L., Haft D., Hickey E., Kolonay J.F., Nelson W.C., Umayam L.A., Ermolaeva M.D., Salzberg Delcher A., Utterback T., Weidman J., Khouri H., Gill J., Mikula
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MEDLINE=98295987; PubMed=9634230;
Cole S.T., Brosch R., Parkhill J., Ga
                                                                                                                                                                                                                                                                                                                     identification of mutations associated with ant in Mycobadterium tuberculosis by automated DNA Arch. Pathol. Lab. Med. 119:131-138(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                            Kapur V., Li L.L., Hamrick M.R., Plikaytis B. Telenti A., Jacobs W.R. Jr., Banerjee A., Col Clarridge J.E., Kreiswirth B.N., Musser J.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SPECIES=M.bovis, and Ros C., Belak K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Whole genome comparison of Mycobacterium tuberculosis clinical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
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MEDLINE=87137260; PubMe
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
                                                                                                                                          Katsuyama
                                                                                                                                                                                                                                                                                                                                                                               "Rapid Mycobacterium species assignment and unambiguous identification of mutations associated with antimicrobial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  laboratory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Infect. Immun.
                                                                                                               Detection and identification of mycobacteria by PCR-RFLP method.";
FUNCTION: Prevents misfolding proper assembly of unfolded poconditions (By similarity).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        M.tuberculosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN-Erdmann,
                        ng and promotes
polypeptides ge
                                                                                                                                                                              Furuwatari C., Furihata
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Q9EWD1;

01-MAR-2001 (TrEMBLrel. 16, Created)

01-MAR-2001 (TrEMBLrel. 16, Last sequence update)

01-MAR-2002 (TrEMBLrel. 20, Last annotation update)

Heat-shock protein (Fragment).
                                                                                                                                                                                                                               HSSP; P06139; 1AON.
InterPro; IPR002423; Cpn60/TCP-1.
Pfam; PF00118; cpn60 TCP1; 1.
PRINTS; PR00304; TCOMPLEXTCP1.
                                                                                                                                                                                                                                                                                               "A cold-shock-like gene with pleitropic effects on Strey antibiotic biosynthesis."; Submitted (OCT-199) to the EMBL/GenBank/DDBJ databases. EMBL; AJZ50536; CAC19351.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=1902;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Streptomycineae;
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                                                                                                                                                                                                              ATP-binding; Chaperone.
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                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
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                                                  GPKGRNVVLEKKWGAPTITNDG
                                                                     GPKGRNVVLEKKWGAPTITNDG
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Q8GBC2
Q8GBC2
Q8GBC2
Q8GBC9
Q9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q9REU4
Q9BZV4
Q9RC20
Q9RC20
Q8GB95
Q9AMJ8
Q9EY76
Q9EY76
Q8DMD4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q9KI71
Q9KI57
Q93M78
Q8G879
                                                                                                                0,
                                                                                                                                                                                                                                                                                                                                               n M., Alkema W., Holmes
pleitropic effects on S
                                                                                                                                                                                E7B24199B7DE68FA CRC64;
                                                                                                                                Score 122; DB 2; Pred. No. 9.8e-12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ALIGNMENTS
                                                52
                                                                               22
                                                                                                                  Mismatches
                                                                                                                  0,
                                                                                                                                                                                                                                                                                                                                                 lmes D., Malpartida on Streptomyces
                                                                                                                                                 Length 59;
                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qsey76 scardovia i Q8dmd4 synechococc O31198 leptospira Q8kzn2 the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q9ki71 parascardov
Q9ki57 gardnerella
Q93m78 bifidobacte
Q8g879 bifidobacte
Q9reu4 bifidobacte
Q9erv4 bacillus st
Q9er204 bacillus sp
Q8gb95 heliobacill
Q9amj8 anabaena sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q8cx13 q
Q8gbd0 ei
Q8gbc6 ei
Q8gbc4 ei
Q8gbc2 ei
Q8gbc0 ei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q8gbc8
Q8gbb8
Q8gj00
Q8gj00
Q9f4e5
Q8vus2
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Q9exm7 Q9ewa8 Q9ewa9

serratia

buchnera ap secondary s serratia ma serratia ma neterobacte

6 enterococcu
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thermus sp. oceanobacil

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RESULT 3
P97086
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Best Local S
Matches 22
                                                                                                                                                                                                                                                                                                                                                                                  01-MAY-1997
01-MAY-1997
01-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q9EUR7;
Q9EUR7;
01-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                           P97086;
        PRINTS; PR00298; CHAPERONIN60.
PRINTS; PR00304; TCOMPLEXTCP1.
PROSITE; PS00296; CHAPERONINS_CPN60; 1.
                                   EMBL; U90204; AAB49990.1; -.
HSSP; P06139; 1GRL.
InterPro; IPR001844; Chaprnin Cpn60.
InterPro; IPR002423; Cpn60/TCP-1.
Pfam; PF00118; Cpn60 TCP1; 1.
PRINTS; PR00298; CHAPERONIN60.
                                                                                                                                                                   Submitted (FEB-1997) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: PREVENTS MISFOLDING AND PROMOTES THE REFOLDING PROPER ASSEMBLY OF UNFOLDED POLYPEPTIDES GENERATED UNDER
                                                                                                                                                                                                                                                                                                    Tsukamurella tyrosinosolvens.
Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
Corynebacterineae; Tsukamurellaceae; Tsukamurella.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Martinez-Costa O.H., Zalacain M., Alkema W., Holmes D., "A cold-shock-like gene with pleitropic effects on Strep antibiotic biosynthesis.";
Submitted (OCT-1999) to the EMBL/GenBank/DDBJ databases.
EMBL, AJ250537; CAC19355.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Streptomyces hygroscopicus.
Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales; Streptomycineae; Streptomycetaceae; Streptomyces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-MAR-2001
01-MAR-2002
                                                                                                                  7 SUBUNITS (BY SIMILARITY).
-I- SIMILARITY: BELONGS TO THE CHAPERONIN (HSP60) FAMILY
                                                                                                                                   -!- SUBUNIT: OLIGOMER OF 14 SUBUNITS COMPOSED OF TWO STACKED 7 SUBUNITS (BY SIMILARITY)
                                                                                                                                                                                                                                                                                                                                                          protein).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pfam; PF00118; cpn60_TCP1; 1.
PRINTS; PR00304; TCOMPLEXTCP1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Streptomycineae;
NCBI_TaxID=1912;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GROEL2
                                                                                                                                                                                                                       Zimmermann O., Pinkenburg O., "Tsukamurella tyrosinosolvens
                                                                                                                                                                                                                                                STRAIN=IMMIB D-1411;
                                                                                                                                                                                                                                                                                                                                                                       Heat shock
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HSSP; P06139; 1AON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN=AF 141;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Heat-shock protein
                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TP-binding; Chaperone.
                                                                                                                                                                                                                                                                                                                                               ISP60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              nterPro; IPR002423; Cpn60/TCP-1.
                                                                                                                                                      FUNCTION: PREVENTS MISPOLDING PROPER ASSEMBLY OF UNFOLDED PO CONDITIONS (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 GPKGRNVVLEKKWGAPTITNDG
                                                                                                                                                                                                          60.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GPKGRNVVLEKKWGAPTITNDG
                                                                                                                                                                                                                                                                                                                                                                    7 (TrEMBLrel. 03, Created)
7 (TrEMBLrel. 03, Last sequence update)
2 (TrEMBLrel. 22, Last annotation update)
protein 60 (60 kDa chaperonin) (Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (TIRMBLrel. 16, Created)
(TIRMBLrel. 16, Last sequence update)
(TIRMBLEL. 20, Last annotation update)
protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
Chaperone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6645 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               D200995F4199B7CA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 122;
Pred. No.
                                                                                                                                                                                                                         sp. nov. hsp60 gene for heat shock
                                                                                                                                                                                                                                      Koechel H.G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          52
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                          539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1e-11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               effects on Streptomyces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ₿
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                       Cpn60) (groEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             D., Malpartida
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61;
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                                                                                                                                                                                    AND
                                                                                                                                              RINGS
                                                                                                                                                                       STRESS
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RESULT 5
Q93Q12
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  RRR ROCCOS GET TT
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                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q9AFA5
Q9AFA5;
01-JUN-2001
                                                                                                                                                                                                                                                                                            Q93QI2;
Q93QI2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PROSITE; PS00296; CHAPERONINS_CPN60; 1.
ATP-binding; Chaperone.
SEQUENCE | 540 AA; 56506 MW; 524E5CDB2C49BF7C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN=ATCC6939;
Vanniasinkam T.,
                                                                                 Corynebacterineae; Nocardiaceae; Rhodococcus
NCBI_TaxID=43767;
                                                                                                                                                                                 GROSL.
                                                                                                                                                                                                 großL protein
                                                                                                                                                                                                                           01-MAR-2003
                                                                                                                                                                                                                                                  01-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRINTS; PRO0304; TCOMPLEXTCP1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -!- SIMILARITY: BELONGS TO THE CHAPERONIN EMBL; AP352578; AAK18614.1; -- HSSP; P06139; IGRL. INTERPRO, IPR001844; Chaprnin Cpn60. InterPro; IPR001842; Cpn60/TCP-1. Pfam; PF00118; cpn60_TCP1; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tsukamurella paurometabola.
Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
Corynebacterineae; Tsukamurellaceae; Tsukamurella.
NCBI_TaxID=2061;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-JUN-2001 (TrEMBLrel. 27, Last sequence update)
01-CCT-2002 (TrEMBLrel. 22, Last annotation update)
Heat shock protein 60 (60 kDa chaperonin) (Protein Cpn60) (groEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                            SEQUENCE FROM N.A.
                                                                                                                                  Bacteria; Actinobacteria;
                                                                                                                                                     Corynebacterium equii (Rhodococcus equi).
                                                                                                                                                                                                                                                                          01-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -!- SUBUNIT: OLIGOMER OF 14 SUBUNITS 7 SUBUNITS (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HSP60.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             GPKGRNVVLEKKWGAPTITNDG 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GPKGRNVVLBKKWGAPTITNDG 22
                                                                                                                                                                                                                                                                                                                                                                                                                                 GPKGRNVVLEKKWGAPTITNDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GPKGRNVVLEKKWGAPTITNDG
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                                                                                                                                                                                                                           (TrEMBLrel. 19, Created)
(TrEMBLrel. 19, Last sequence update)
(TrEMBLrel. 23, Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                      PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                                                                      (60 kDa chaperonin)
Barton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              56137 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 122;
100.0%; Pred. No. 1
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  M.D.,
                                                                                                                                  Actinobacteridae; Actinomycetales;
                                                                                                                                                                                                                                                                          Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
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  Heuzenroeder M.W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 122;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No.
                                                                                                                                                                                                                                                                                                                        PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                      52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
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                                                                                                                                                                                                        (Protein Cpn60).
                                                                                                                                                                                                                                                                                                                        541
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (HSP60) FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 2;
                                                                                                                                                                                                                                update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 540;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TWO STACKED RINGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 539;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
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STRESS
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Result
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Maximum
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Maximum Match 100%
Listing first 45 s
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Perfect score:
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seq length: 2000000000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |SIDS1|gcgdata|geneseq|geneseqp-emb1|AA1980_DAT:*
|SIDS1|gcgdata|geneseq|geneseqp-emb1|AA1981.DAT:*
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                AAY93328
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ALTCHMENTS	AAB31611	ABG70775	ABG70778	ABG70776	ABG70777	AAB31614	AAB31609	AAB03790	AAP80364	AAR64766	AAR64765	AAR04715	AAR04716	AAP80215	AAW32099	ABB73515	AAY23913	AAY23910	AAY14909	AAR67384	ABG74588	ABG74587	AAM50750	AAU76194	AAU76193	AAU76511	AAU76510	AAB31606	AAG81118	AAE11755	AAY93332	AAY23911	AAW44702	AAW32100	ð	AAP81351	
	Amino acid sequenc	His tagged BCG Hsp	Hsp65/muta		sp65/m	acid	o acid	O	_	tuberculos		Amino acid sequenc	Amino acid sequenc	Sequence of Mycoba	Mycobacteria sp. h	cae Gr	acid	acid	ino acid sequen	. leprae GroEL1	tuberculosis			Mycobacterium tube	cobacterium lep	tuberculosis 6	prae		Mycobacterium tube	acteri	acid	Amino acid sequenc	n tub	Mycobacteria sp. h	teri	Sequence of Mycoba	

ALIGNMENTS

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Peptide having a defined sequence is used in vaccines immunity against autoimmune disease or inflammatory diespecially arthritis -
                                            WPI; 2000-376486/32.
                                                                                                                                                                                                                   Epitope; heat shock protein 60; Hsp60; vaccine; autoimmune disease; inflammatory disorder; arthritis.
                                                                                                                                                                                                                                                                         04-SEP-2000
                                                                                                                                                                                                                                                                                              AAY93328;
                                                                                                                                                                                                                                                                                                                   AAY93328 standard; peptide; 22
                                                                 Naparstek Y,
                                                                                                          05-NOV-1998;
                                                                                                                                                    18-MAY-2000
                                                                                                                                                                                              Mycobacterium tuberculosis.
                                                                                                                               04-NOV-1999;
                                                                                                                                                                         WO200027870-A1.
                                                                                                                                                                                                                                                  Amino acid_{\parallel}sequence of an epitope of heat shock protein 60
                                                                                     (HADA-) HADASIT MEDICAL RES SERVICES & DEV.
                                                                                                                                                                                                                                                                        (first entry)
                                                                Ulmansky R,
                                                                                                          98US-0107213.
                                                                                                                                99WO-IL00595
                                                                  Kashi Y;
                                                                                                                                                                                                                                                                                                                    B
                      for conferring
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AAY23919

acid sequenc

Claim 1; Page 7; 58pp; English

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RESULT 2
AAW60145
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present sequence represents an epitope of the heat shock protein 60 (Hsp60) of Mycobacterium tuberculosis. The peptide, and the nucleic acid encoding it, are useful in vaccines for conferring immunity against autoimmune disease or inflammatory disorders, especially arthritis. The peptide may also be used to raise antibodies, which are then used for passive immunisation.
                                                                                                                                                                                                                                                                                                                                                                     Hiyama J,
Visser E;
        This represents a Mycobacterium vaccae antigen GV-27A. The invention provides M. vaccae polypeptides that comprise an immunogenic portion of a soluble M. vaccae antigen, or a variant, where the antigen induces an immune response in patients previously exposed to a mycobacterium. Such M. vaccae polypeptides can be used in methods for enhancing non-specific immune response. The methods and products can be used for the detection, treatment and prevention of infectious diseases caused by mycobacteria such as M. vaccae, M. avium or M. tuberculosis. The products also have the ability to induce cell proliferation and cytokine production have interferon-gamma and interleukin-12 production) in T cells, NK cells, cells, or macrophages. They can be used for enhancing immune responses for use in vaccines or immunotherapy of infectious diseases and cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mycobacterium vaccae; antigen; therapy; prevention; cytokine production; M. avium; M. tuberculosis; immune response enhancer; cell proliferation; mycobacteria infection; vaccine; cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                       Claim 48; Pages 117-118; 153pp; English.
                                                                                                                                                                                                                                                    Mycobacterium vaccae polypeptides - used to develop products for use in detection, therapy and prevention of mycobacteria infections or as immune response enhancers
                                                                                                                                                                                                                                                                                                                       N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9808542-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mycobacterium
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAW60145 standard; Protein; 215 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                   12-JUN-1997;
29-AUG-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-AUG-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antigen GV-27A sequence
                                                                                                                                                                                                                                                                                                                                                                                    Prestidge
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 vaccae.
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96US-0705347.
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                                                                                                                                                                                                                                                                                                                                                                                    RL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%;
                                                                                                                                                                                                                                                                                                                                                                                      Scott LM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
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Pred. No. 3.9e-13;
Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                      Skinner MA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
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Best Local 8
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                                                                                    The invention provides heat-killed Mycobacterium vaccae, or recombinant M. vaccae proteins. The M. vaccae proteins may be employed to activate T cells and natural killer cells, to stimulate the production of cytokines; to enhance the expression of co-stimulatory molecules on dendritic cells and monocytes, and to enhance dendritic cell maturation and function. The proteins can be expressed by standard recombinant methodology. Pharmaceutical compositions comprising the proteins or nucleic acid sequences encoding the proteins can be used for the treatment, prevention, and detection of disorders including infectious diseases, immune disorders and cancer. In particular, the compounds and methods are used for treatment of diseases of the respiratory system, such as mycobacterial infections, asthma, allergies, tuberculosis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-DEC-1997;
23-DEC-1997;
11-JUN-1998;
17-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                               psoriasis, atopic derma alopecia areata, and sk carcinoma and melanoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          04-DEC-1998;
23-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mycobacterium vaccae protein; antigen; T cell activation; cytokine; dendritic cell maturation; infectious disease; immune disorder; can respiratory system; mycobacterial infection; allergy; tuberculosis; leprosy; sarcoidosis; lung cancer; astima; skin disorder; psoriasis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-OCT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAY14892;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mycobacterium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             squamous cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             dermatitis; eczema; alopeci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Amino acid sequence of M.
                                             leprosy, sarcoidosis and lung cancers, and disorders of the skin such as
psoriasis, atopic dermatitis, eczema, allergic contact dermatitis,
alopecia areata, and skin cancers such as basal carcinoma, squamous cell
                                                                                                                                                                                                                                                                                                                        Enhancing immune response to an antigen
                                                                                                                                                                                                                                                                                                                                                        N-PSDB; AAZ11344
                                                                                                                                                                                                                                                                                                                                                                         WPI; 1999-430163/36.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9932634-A2
                                                                                                                                                                                                                                                                                            Example 14; Page 191-192; 243pp; English
                                                                                                                                                                                                                                                                                                                                                                                                    Prestidge RL,
                                                                                                                                                                                                                                                                                                                                                                                                                                  (GENE-) GENESIS RES & DEV CORP LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             215 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 vaccae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               carcinoma; melanoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-0205426.
97US-0996624.
97US-0997080.
97US-0997362.
                                                                                                                                                                                                                                                                                                                                                                                                       Skinner MA,
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98US-0156181.
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                                                                                                                                                                                                                                                                                                                                                                                                       Tan
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Pred. No. 5.9e-12;
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                                                                                                                                                                                                                                                                                                                                                                                                       Visser ES,
                                                                                                                                                                                                                                                                                                                                                                                                          Watson
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Sequence

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Minimum DB seq length: 0
Maximum DB seq length: 200000000
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Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein search, using sw model
                                                                                                                                                                                                                                                             Published_Applications_AA:*

1: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*

3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*

4: /cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep:*

5: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*

6: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep:*

7: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep:*

8: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep:*

8: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep:*
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122
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145.229 Million cell updates/sec
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Copyright (c) 1993 - 2003 Compugen Ltd.
/cgn2_6/ptodata/2/pubpaa/US09A PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US09B PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US09B PUBCOMB.pep:*
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/cgn2_6/ptodata/2/pubpaa/US10A PUBCOMB.pep:*
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/cgn2_6/ptodata/2/pubpaa/US10B PUBCOMB.pep:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARII

1	Regul
110 110 110 110 110 110 110 110 110 110	<u>.</u>
	Score
100000000000000000000000000000000000000	Query Match Length
54400	Length
10124514005555434	DB
US-09-847-637B-1 US-09-880-505-117 US-10-205-979-41 US-10-205-979-41 US-10-051-643-117 US-10-267-311-33 US-09-880-505-114 US-10-051-643-114 US-10-051-643-116 US-09-847-637B-6 US-09-847-637B-6 US-09-847-637B-6 US-09-847-637B-6 US-10-267-311-4 US-09-880-505-160 US-10-267-311-4 US-09-880-505-160 US-10-205-979-40 US-10-205-979-40 US-10-051-643-160	ID
Sequence 1, Appli Sequence 117, App Sequence 41, Appl Sequence 33, Appl Sequence 33, Appl Sequence 114, Appl Sequence 114, App Sequence 6, Appli Sequence 6, Appli Sequence 3, Appli Sequence 3, Appli Sequence 4, Appli Sequence 4, Appli Sequence 40, Appli Sequence 40, Appli Sequence 40, Appli	Description

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US-10-228-16/A-2 US-10-369-493-18994	10 10 000 1013 0	115-10-267-311-51	US-10-369-493-20184	US-10-369-493-513	US-09-276-455-10	US-09-415-849-1	US-10-046-649-2	US-10-369-493-10014	US-10-369-493-19756	US-10-369-493-20873	US-10-369-493-20276	US-10-369-493-16217	US-10-369-493-15468	US-10-369-493-15838	US-10-369-493-9597	US-10-369-493-23094	US-10-369-493-17132	US-10-156-761-12526	US-10-369-493-2950	US-09-738-626-6486	US-10-267-311-21	US-10-068-059-6	US-10-068-059-12	US-10-068-059-8	US-10-068-059-10	US-10-267-311-29	US-10-267-311-17	US-10-369-493-8322	US-10-156-761-11465
Sequence 2,				Sequence 513,	10	۲	٧,			Sequence 20873	Sequence 20276	Sequence 16217	Sequence 15468			Sequence 23094,	Sequence 17132	Sequence 12526	Sequence 2950,	Sequence 6486,	21	σ	12	œ ~	Sequence 10,	Sequence 29,	Sequence 17,	Sequence 8322,	Sequence 114
2, APP11 18994, A	1771	Appl	20184, A	, App	Appl	Appli	Appli	10014, A	56, A	73, A	76, A	17, A	68, A	•	7, Ap	94, A	32, A	•		6, Ap	Appl	Appli	Appl	Appli	Appl	Appl	Appl	2, Ap	11465, A

ALIGNMENTS

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RESULT 2
US-09-880-505-117
; Sequence 117, Application US/09880505
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                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 9
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 1
LENGTH: 22
TYPE: PRT
ORGANISM: Mycobacterium tuberculosis
                                                                                                                                                                                                                                     Query Match 100.0%; Score 122; DB 10; Best Local Similarity 100.0%; Pred. No. 3.6e-12; Matches 22; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1, Application US/09847637B Patent No. US/0020150586A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Naparstek, Yaakov
APPLICANT: Ulmansky, Rina
APPLICANT: Ulmansky, Rina
APPLICANT: Kashi, Yechezkel
TITLE OF INVENTION: THE AMINO ACID SEQUENCES, DNA ENCODING
TITLE OF INVENTION: SEQUENCES AND THE DIFFERENT USES THEREOF
FILE OF INVENTION SEQUENCES AND THE DIFFERENT USES THEREOF
FILE REFERENCE: 13125-002001
CURRENT APPLICATION NUMBER: DCT/IL99/0595
PRIOR APPLICATION NUMBER: PCT/IL99/0595
PRIOR PILING DATE: 1999-11-04
PRIOR PILING DATE: 1999-11-04
PRIOR PILING DATE: 1999-11-05
PRIOR FILING DATE: 1999-11-05
PRIOR FILING DATE: 1999-11-05
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PRIOR FILING DATE: 1998-11-05
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US-10-051-643-117
Sequence 117, Application US/10051643
Publication No. US20020197265A1
GENERAL INFORMATION:
APPLICANT: Watson, James D.
APPLICANT: Tan, Paul L. J.
APPLICANT: Tan, Paul L. J.
APPLICANT: Tone Does not compound for the Treatment TITLE OF INVENTION: of Immunologically-Mediated Diseases of the Respiratory TITLE OF INVENTION: System using Mycobacterium Vaccae
                                                                                                                                                                                                                                                                                                                                                                                                                                              ; SEQ ID NO 41
; LENGTH: 215
; TYPE: PRT
; GRCANISM: Mycobacterium vaccae
US-10-205-979-41
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LENGTH: 215
TYPB: PRT
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APPLICANT: Watson, James D.
APPLICANT: Tan, Paul L. J.
APPLICANT: Abernethy, Nevin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 41, Application US/10205979 Publication No. US20030147861A1
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: Methods and Compounds for the TITLE OF INVENTION: of Immunologically-Mediated 8 FILE REFERENCE: 11000.1007c2 CURRENT APPLICATION NUMBER: US/09/880,505 CURRENT FILING DATE: 2001-06-13 PRIOR APPLICATION NUMBER: US 09/324,542 PRIOR APPLICATION NUMBER: US 09/324,542 PRIOR PILING DATE: 1999-06-02 PRIOR PILING DATE: 1997-12-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/205,979
CURRENT FILING DATE: 2002-07-25
PRIOR APPLICATION NUMBER: 60/308,446
PRIOR FILING DATE: 2001-07-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Compounds and Methods for the Modulation TITLE OF INVENTION: of Immune Responses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 52
SOFTWARE: FastSEQ for Windows Version 4.0
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Tan, Paul L.J.
Prestidge, Ross
                                                                                                                                                                                                                                                                                                                                                              Conservative
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                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 122; DB 12; 100.0%; Pred. No. 4.1e-11;
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                                                                                                                                                                                                                                                                                                                                                                                                        215;
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TYPE: PAT ;
ORGANISM: Mycobacterium vaccae
US-10-051-643-117
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                                                                                                                 Sequence 114, Application US/09880505
Publication No. US20030007976A1
GENERAL INFORMATION:
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Best Local Similarity 100.
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Siegel, Marvin
APPLICANT: Chu, N. Randall
APPLICANT: Mizzen, Lee A.
TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
FILE REFERENCE: 12071/002001
CURRENT APPLICATION UNMEER: US/10/267,311
CURRENT FILING DATE: 2002-10-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/051,643
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US09/156,181
PRIOR FILING DATE: 1998-09-17
PRIOR APPLICATION NUMBER: US 08/996,624
PRIOR APPLICATION NUMBER: US 08/996,624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS:
SOFTWARE: FastSEQ for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: US/09/613,303
PRIOR FILING DATE: 2000-07-10
PRIOR APPLICATION NUMBER: US 60/143,757
                TITLE OF INVENTION: Methods and Compounds for the Treatment TITLE OF INVENTION: of Immunologically-Mediated Skin Disorders
                                                           APPLICANT: Watson, James D. APPLICANT: Tan, Paul L.J. APPLICANT: Prestidge, Ross
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 1999-07-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILE REFERENCE: 11000.1008c2
FILE REFERENCE: 11000.1007c2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 208
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: fusion sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 295
                                                                                                                                                                                                                                                                   31 GPKGRNVVLEKKWGAPTITNDG 52
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                                                                                                     James D.
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CURRENT FILING DATE: 2001-06-13

PRIOR APPLICATION NUMBER: US 09/324,542

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Result
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Maximum
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Maximum Match 100%
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*
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Copyright (c) 1993 - 2003 Compugen Ltd.
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US-08-467-822-3
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US-08-997-080-160
US-08-997-362-160
US-09-095-855-160
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US-08-997-362-114
US-09-095-855-114
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US-08-368-834-20
US-08-461-722-3
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20, Appl
3, Appl
4, Appl
3, Appl
6, Appl
7, A
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114, App
114, App
114, App
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100.0 541 100.0 648 100.0 648 4 4 100.0 549 100.0 548 100.0 548 80.3 547 80.3 547 80.3 547 80.3 548 80.3 548 80
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US-09-324-542-160 US-09-205-426-160 US-09-613-303-17 US-09-613-303-29 US-09-613-303-21 US-09-613-303-21 US-09-613-303-21 US-08-461-722-2 US-08-36-251-2 US-08-467-822-31 US-08-467-822-31 US-08-467-822-32 US-08-467-822-31 US-08-467-822-31 US-08-467-822-31 US-08-467-823-32 US-08-467-823-33 US-08-467-823-33 US-08-467-823-33 US-08-467-823-33

US-08-997-080-117

ALIGNMENTS

Patent No.

Sequence 117, Application US/08997080 Patent No. 5968524

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; TOPOLOGY: 1:
; MOLECULE TYPE:
US-08-997-080-117
                                                                Query Match
Best Local Similarity
Matches 22; Conserv
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SEQUENCE CHARACTERISTICS:
LENGTH: 215 amino acids
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APPLICANT: WATSON, JAMES D.
APPLICANT: TAN, PAUL L.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Sleath, Janet
REGISTRATION NUMBER: 37,007
REFERENCE/DOCKET NUMBER: 111
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
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APPLICATION NUMBER: US/08/997,080
FILING DATE:
CLASSIFICATION:
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MEDIUM TYPE: Diskett
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: 150 CONFINENTIAL CONF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid
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TELEFAX: 206-269-0563
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STREET: 2601 Elliott Avenue, S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Seattle
1 GPKGRNVVLEKKWGAPTITNDG 22
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Suite 4185
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GPKGRNVVLEKKWGAPTITNDG 52

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Best Local :
                                                            Sequence 117, Application US/09095855 Patent No. 6160093
                                               GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                   NFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 215 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: August 29, 1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:

APPLICATION NUMBER: U.S. Patent Application No.
FILING DATE: June 12, 1997
APPLICATION NUMBER: U.S. Patent Application No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OPERATING SYSTEM: DOS
SOPTWARE: PastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: protein
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                  PPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Sleath, Janet REGISTRATION NUMBER: 37,007
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2601 Elliott Avenue, Suite 4185
                                                                                                                                                                                                                                                                                                                                                                                                                                    206-269-0563
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Tan, Paul
Visser, Elizabeth
Skinner, Margot
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Visser, Elizabeth
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100.0%; Pred. No. 1.3e-12;
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RESULT 4
US-09-324-542-117
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EARLIER APPLICATION NUMBER: US 08/997,080
EARLIER FILING DATE: 1997-12-23
NUMBER OF SEQ ID NOS: 194
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 117
LENGTH: 215
                                                                                                                                                                                                                                                                                 Sequence 117, Application US/09324542 Patent No. 6328978 GENERAL INFORMATION:
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Best Local
                                                                                                                     APPLICANT: Tan, Paul L.J.

APPLICANT: Prestidge, Ross
TITLE OF INVENTION: Methods and Compounds for the Treatment
TITLE OF INVENTION: of Immunologically-Mediated Skin Disorders
FILE REFERENCE: 11000.1007c1
CURRENT APPLICATION NUMBER: US/09/324,542
CURRENT FILING DATE: 1999-06-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 08/705,347
FILING DATE: 29-AUG-1996
APPLICATION NUMBER: 08/873,970
FILING DATE: 12-JUN-1997
APPLICATION NUMBER: 08/997,362
FILING DATE: 23-DEC-1997
ATTORNEY/ACENT INFORMATION:
                                                                                                                                                                                                                                                                   APPLICANT: Watson, James D.
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REFERENCE/DOCKET NUMBER: 111
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-269-0565
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OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Diskett
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ADDRESSEE: Law Offices of Ann W. Speckman
STREET: 2601 Elliott Avenue, Suite 4185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION:
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_	OY 1 GPKGRNVVLEKKWGAP 16 Db 31 GPKGRNVVLEKKWGAP 46	Query Match 100.0%; Score 90; DB 2; L Best Local Similarity 100.0%; Pred. No. 5.2e-07; Matches 16; Conservative 0; Mismatches 0;	C;Genetics: A;Gene: groEL2;:Rv0440 C;Superfamily: chaperonin groEL	A; Molecule type: DNA A; Residues: 1-540 <col/> A; Cross-references: GB:AL021932; GB:AL123456; NID:g3261527; A; Experimental source: strain H37Rv	ecipnering the bloody of Mycobacterium e number: A70500; MUID:98295987; PMID:96 n: A70830 preliminary; nucleic acid sequence not s	998 866	A, Molecule type: DNA A, Molecule type: DNA A, Rosidues: 1-540 <shi> A, Cross-references: GB:M15467; NID:g149999; PIDN:AAA88232.1; PID:; A, Cole, S.T., Brosch, R., Parkhill, J.; Garnier, T.; Churcher, C. R, Colle, S.T., Davies, R.; Devlin, K.; Feltwell, T.; Gentles, S.; J</shi>	R;Shinnick, T.M. J. Bacteriol. 169, 1080-1088, 1987 A;Title: The 65-kilodalton antigen of Mycobacterium tuberculosis A;Reference number: A26950; MUID:87137260; PMID:3029018 A;Accession: A26950	N/ALTERNATE names: box antigen C;Species: Mycobacterium tuberculosis C;Date: 02-un-1988 #sequence_revision 02-Jun-1988 #text C;Accession: A26950; A70830	RESULT 1 A26950 groEL2 protein - Mycobacterium tuberculosis (strain H37RV)	ALIGNMENTS	30 75 83.3 546 2 B47073 31 74 82.2 534 2 S26877 32 74 82.2 541 2 S68249 33 74 82.2 552 2 S74322 34 74 82.2 560 2 AB2043 35 73 81.1 174 2 T07736 36 73 81.1 542 2 JN0661 38 73 81.1 542 2 S32106 39 73 81.1 542 2 S32106 40 73 81.1 542 2 S32106 40 73 81.1 542 2 S32106 41 73 81.1 546 2 140342 41 73 81.1 546 2 RG3640 42 73 81.1 546 2 RG3640 43 73 81.1 546 2 AG3640 44 73 81.1 550 2 A41468 45 73 81.1 550 2 A41468	
		Length 540; Indels 0; Gaps 0;		1527; PIDN:CAA17397.1; PID:g29095	transla	; Squares, S Barrell, B.G	g150000 ; Harris, D Hamlin, N.;	berculosis. 8	xt_change 20-Jun-2000	7RV)		chaperonin GroEL - groEL protein - re chaperonin groEL h chaperonin groEL-2 chaperonin GroEL [probable chaperoni chaperonin HSP60 - heat shock protein groEL protein - La 60 KD chaperonin [heat shock protein groEL - Brucella a 60K chaperonin gro chaperonin, 60 KD 60K chaperonin, 60 KD 60K chaperonin, 60 KD 60K chaperonin, 60 KD 60K chaperonin, 60 KD	

65K antigen mbaA - Mycobacterium bovis
6;Species: Mycobacterium bovis
C;Species: Mycobacterium bovis
C;Date: 28-Oct-1992 #sequence_revision 28-Oct-1992 #text_change 26-Aug-1999
C;Accession: A43509
R;Thole, J.B.R.; Keulen, W.J.; Kolk, A.H.J.; Groothuis, D.G.; Berwald, L.G.; Tiesjema, Infect. Immun. 55, 1466-1475, 1987
A;Title: Characterization, sequence determination, and immunogenicity of a 64-kilodalto: A;Reference number: A43509; MUID:87193155; PMID:3553003
A;Accession: A43509

RESULT 2 A43509

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J. Hacteriol. 173, 7382-7386, 1991
A; Thompson, C.J.
A; Title: Characterization of the groEL-like genes in Streptomyces albus.
A; Reference number: A41325; MUID:92041639; PMID:1682304
A; Accession: C41325
                                                                                                                                                                                                                                                           R;Colston, X.Y.Z.; McConnell, X.Y.Z.; Bujdoso, R. submitted to the EMBL Data Library, August 1993 A;Description: Cloning and expression of Mycobacterium paratuberculosis HSP65KD. A;Reference number: S40245 A;Accession: S40245
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A;Molecule type: DNA
A;Residues: 1-540 <THO>
A;Cross-references: GB:M17705; NID:g149933; PIDN:AAA25358.1; PID:g149934
C;Superfamily: chaperonin großL
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A; Residues: 1-541 < COL>
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C;Species: Mycobacterium paratuberculosis
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 26-Aug-1999
C;Accession: S40245
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C;Genetics:
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N;Alternate names: heat shock protein großL homolog 2
C;Species: Streptomyces albus
C;Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 26-Aug-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Molecule type: DNA
                                                                                                                                                           ;Cross-references: EMBL:X74518; NID:g438180; PIDN:CAA52630.1; PID:g438181;Superfamily: chaperonin groEL
                                                                                                                                                                                                                                            Status: preliminary
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nes 16; Conserv
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                                                                            Match 100.0%; Score 90; Local Similarity 100.0%; Pred. No. les 16; Conservative 0; Mismatch
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                    GPKGRNVVLEKKWGAP 16
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                                                                                                                        DB 2;
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RESULT 5

chaperonin 60K [imported] - Mycobacterium leprae N;Alternate names: heat shock protein GroEL-2

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chaperonin-like protein groEL2 - Synechococcus sp.
C;Species: Synechococcus sp.
C;Date: 19-Mar:1998 #sequence_revision 17-Apr-1998 #text_change
C;Accession: S70013; S70022
R;Furuki, M., Tanaka, N.; Hiyama, T.; Nakamoto, H.
Biochim. Biophys. Acta 1294, 106-110, 1996
A;Title: Cloning, characterization and functional analysis of gr.
A;Reference number: S70013; MUID:96248387; PMID:8645726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 7
S70013
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Proc. Natl. Acad. Sci. U.S.A. 83, 7013-7017, 1986
A;Title: Efficient mapping of protein antigenic determinants.
A;Reference number: A25902; MUID:86313701; PMID:2428046
A;Accession: A25902
A;Gene: groEL2
C;Superfamily: chaperonin groEL
C;Keywords: heat shock
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C;Superfamily: chaperonin groEL
C;Keywords: molecular chaperone
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A;Cross-references: EMBL:AL035159; PIDN:CAA22689.1
A;Experimental |source: cosmid B1450
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A;Reference number: Z22831
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C;Date: 21-Jan-2000 #sequence_revision 21-Jan-2000 #text_change
C;Accession: T44725
                                                                                                                A; Molecule type: protein
A; Residues: 2-11 < FUW >
                                                                                                                                                                             A,Cross-references: GB:D86384; EMBL:D17354; NID:g1408522; PIDN:BAA13082.1; PID:g1228069
A,Note: the source is designated as Synechococcus vulcanus
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A; Residues: 1-543 < FUR>
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A; Residues: 1-588 <MEH>
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A;Status: preliminary; translated
                                                                                        A; Note: the source is designated
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    Mycobacterium leprae

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      of hits satisfying chosen parameters:
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PRINTS; PR00298; CHAPERONIN60.

PRINTS; PR00304; TCOMPLEXTCP1.

PROSITE; PS00296; CHAPERONINS_CPN60; 1.

Chaperone; ATP-binding.

SEQUENCE 539 AA; 56137 MW; 63353148300
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60 kDa chaperonin
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P06806; Q48920; Q48931; O1-JAN-1988 (Rel. 06, Created) 01-JAN-1988 (Rel. 06, Created) 01-OCT-1996 (Rel. 34, Last sequence update) 15-SEP-2003 (Rel. 42, Last annotation update) 60 kDa chaperonin 2 (Protein Cpn60-2) (groEL protein 2) (65 kDa antigen) (Heat shock protein 65) (Cell wall protein A) (Antigen A). GROL2 OR GROEL-2 OR HSP65 OR RV0440 OR MT0456 OR MTV037.04. Mycobacterium bovis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
Corynebacterineae; Tsukamurellaceae; Tsukamurella.
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HSSP; P06139;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          conditions (By similarity).
SUBUNIT: Oligomer of 14 subunits composed of two stacl 7 subunits (By similarity).
SUBCELLULAR LOCATION: Cytoplasmic (By similarity).
SIMILARITY: Belongs to the chaperonin (HSP60) family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FUNCTION: Prevents misfolding and promotes the refolding proper assembly of unfolded polypeptides generated under
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(Protein Cpn60) (groEL prot
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Badcock K., Basham D., Brown D., Chillingworth T., Connor R.,
Davies R., Devlin K., Feltwell T., Gentles S., Hamlin N., Holroyd
Hornsby T., Jagels K., Krogh A., McLean J., Moule S., Murphy L.,
Oliver S., Osborne J., Quail M.A., Rajandream M.A., Rogers J.,
Rutter S., Seeger K., Skelton S., Squares S., Squares R.,
Sulston J.B., Taylor K., Whitehead S., Barrell B.G.;
"Deciphering the biology of Mycobacterium tuberculosis from the
complete genome sequence.";
Nature 393:537-544(1998).
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SEQUENCE FROM N.A.

SPECIES=M:bovis; STRAIN=BCG;

SPECIES=M:bovis; STRAIN=BCG;

SPECIES=M:bovis; STRAIN=BCG;

MEDLINE=87193155; PubMed=3553003;

Thole J.E.R., Keulen W.J., Kolk A.H.J., Groothuis D.G., Berwall Thesjema R.H., van Embden J.D.A.;

Tiesjema R.H., van Embden J.D.A.;

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Fleischmann R.D., Alland D., Bisen J.A., Carpenter L., White O.,
Peterson J., DeBoy R., Dodson R., Gwinn M.L., Haft D., Hickey E.,
Kolonay J:F., Nelson W.C., Umayam L.A., Ermolaeva M.D., Salzberg S.L
Belcher A., Utterback T., Weidman J., Khouri H., Gill J., Mikula A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SPECIES=M.bovis, and M.tuberculosis; STRAIN=TMC MEDLINE=95150784; PubMed=7848059; Kapur V., Li L.L., Hamrick M.R., Plikaytis B.B., Telenti A., Jacobs W.R. Jr., Banerjee A., Cole S Clarridge J.B., Kreiswirth B.N., Musser J.M.;
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NCBI_TaxID=1773, 1765;
Rinsho Byori 43:155-161(1995).
-|- FUNCTION: Prevents misfolding proper assembly of unfolded poconditions (By similarity).
                                                                                                                                                                                            Hidaka E., Ue
Katsuyama, T.;
                                                                                                                                                                                                                                                                                                                                                                                                                            "Rapid Mycobacterium species assignment and unambiguous identification of mutations associated with antimicrobial resistance in Mycobacterium tuberculosis by automated DNA sequencing."; Arch. Pathol. Lab. Med. 119:131-138(1995).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Submitted (APR-2001) to
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales; Corynebacterineae; Mycobacteriaea; Mycobacterium.
                                                                                                                                                        "Detection and identification of mycobacteria by PCR-RFLP method.";
                                                                                                                                                                                                                                                                                                                                                                SEQUENCE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Submitted (MAY-1996) to the EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Whole genome comparison of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "The 65-kilodalton antigen of Mycobacterium
J. Bacteriol. 169:1080-1088(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tuberculosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              strains.";
                                                                                                                                                                                                                                                                                                                                                            64-177 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     55:1466-1475 (1987)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     M.tuberculosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN=H37Rv;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN=Brdmann,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mycobacterium tuberculosis clinical and
                                        ng and promotes the reformation polypeptides generated
                                                                                                                                                                                                                                            Furuwatari
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN=356, and 12-14001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN-TMC 410, and TMC 1024;
                                                                                                                                                                                                                                            C., Furihata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tuberculosis.";
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Shinnick T.M.,
., Yuen K.Y.,
                                                                                        refolding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Berwald L.G.,
                                                            stress
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Minimum
Maximum
                                                                                                                                                                                                                                                                Database
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                                                                                                                                                                                                                                                                                                                                                                                                                                   Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                          Post-processing:
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                                                                                                                                                                                                                                                                                                                                                      DB seq
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length: 2000000000
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160.171 Million cell updates/sec
                                                                                                                                                                                                                                               SPTREMBL 23:*
1: sp_archea:
                                                                                                                                                                                                                                                                                                                                                                                                                                   830525 segs, 258052604 residues
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90
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Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GPKGRNVVLEKKWGAP 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Copyright
                                                                                                                                                                                                                                sp_archea:*
sp_bacteria:*
                                                                                                                         sp_phage: *
                                                                                                                                    sp_organelle:*
            sp_unclassified:*
sp_rvirus:*
sp_bacteriap:*
sp_archeap:*
                                                                            sp_rodent:*
sp_virus:*
                                                         sp_vertebrate:*
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                                                                                                                                                                       mammal:*
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                                                                                                                                                                                                                    tung1:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GenCore version 5.1.6 (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gapext 0.5
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed and is derived by analysis of the total score distribution.

SUMMARIES

16	15	14	13	12	11	10	9	80	7	σ	ъ	4	ω	2	1	Result No.
84	84	85	90	90	9.0	90	90	90	90	90	90	90	90	90	90	Score
93.3	93.3	94.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	Query Match
548	547	533	549	548	548	548	548	542	541	541	541	540	539	61	59	Query Match Length DB
16	16	Ν	N	N	N	N	N	Ņ	N	N	N	Ŋ	N	N	Ŋ	BB
Q8NM64	QBCY22	Q9FDS2	Q8GAR9	Q8G8X0	Q8G923	Q8GAR7	Q8GAR8	Q9AFC5	Q9KGW1	Q9AFA6	Q93QI2	Q9AFAS	P97086	Q9EUR7	Q9EWD1	ij
Q8nm64 corynebacte	O8cy22 corynebacte	Q9fds2 propionibac	Q8gar9 mycobacteri	Q8g8x0 mycobacteri	Q8g923 mycobacteri	Q8gar7 mycobacteri	Q8gar8 mycobacteri	Q9afc5 nocardia as	Q9kgw1 mycobacteri	Q9afa6 nocardia fa	Q93qi2 corynebacte	Q9afa5 tsukamurell	P97086 tsukamurell	Q9eur7 streptomyce	Q9ewd1 streptomyce	Description

RESULT 2

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
73	73	73	73	73	73	73	73	73	.73	74	74 :	75	75	75	75	75	75	75	76	76	77	77	77 :	77	78	78	80	81
81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	82.2	82.2	83.3	83.3	83.3	83.3	83.3	83.3	83.3	84.4	84.4	85.6	85.6	85.6	85.6	86.7	86.7	88.9	90.0
537	532	532	532	531	531	531	531	531	174	545	543	582	580	576	576	576	573	546	599	598	581	545	539	539	585	524	545	543
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Q9KI71	Q8CWJ0	Q8GBB8	Q8GBC8	Q8GBC0	Q8GBC2	Q8GBC4	Q8GBC6	Q8GBD0	P93571	Q8CXL3	Q8KZN2	Q9U5L7	096783	Q8IHD0	Q8MZM9	Q8MZB0	Q9U5N2	031198	P93570	Q9XYR7	046219	Q8GB95	Q9RC20	Q9EZV4	Q8L7B5	049314	Q8DMD4	Q9AMJ8
Q9ki71 parascardov	0	Q8gbb8 enterococcu	Q8gbc8 enterococcu	Q8gbc0 enterococcu	Q8gbc2 enterococcu	Q8gbc4 enterococcu	Q8gbc6 enterococcu	Q8gbd0 enterococcu	P93571 solanum tub	Q8cxl3 oceanobacil		Q9u517 paracentrot	096783 plectus acu		Q8mzm9 trichinella	Q8mzb0 drosophila		O31198 leptospira	P93570 solanum tub	Q9xyr7 onchocerca	O46219 culicoides	Q8gb95 heliobacill		77	Q817b5 arabidopsis	O49314 arabidopsis	4 synechoc	Q9amj8 anabaena sp

ALIGNMENTS

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RESULT 1
Q9EWD1
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                                                                                                                                                                      Best Loc
Matches
                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN-J802;

Martinez-Costa O.H., Zalacain M., Alkema W., Holmes D., Malpartida F.;
"A cold-shock-like gene with pleitropic effects on Streptomyces antibiotic biosynthesis.";
Submitted (OCT-1999) to the EMBL/GenBank/DDBJ databases.
EMBL; AJ250536; CAC19551.1; -.
HSSP; P06139; 1AON.
InterPro; IPR002423; Cpn60/TCP-1.
Pfam; PF00118; cpn60 TCP1; 1.
Pfam; PF00118; cpn60 TCP1; 1.
Pfam; PF00118; cpn60 TCP1; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Streptomyces coelicolor.
Streptomyces coelicolor.
Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
Streptomycineae; Streptomycetaceae; Streptomyces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q9EWD1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
Heat-shock protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Streptomycineae;
NCBI_TaxID=1902;
                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                    ATP-binding; Chaperone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GROEL2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                             Local
        31
                                                                                                                                                                  ch 100.0%; ill similarity 100.0%; ill similarity 100.0%; ill similarity 0;
1 GPKGRNVVLEKKWGAP 16
                                                                                                                                                                                                                                                                                                                                    59 AA; 6407 MW; E7B24199B7DE68FA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRELIMINARY;
                                                                                                                                                                                                             Score 90; DB 2;
Pred. No. 8e-08;
                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      59
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                                                                                                                                                                                                                                                        Length 59;
                                                                                                                                                                           Indels
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                                                                                                                                                                           Gaps
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RESULT 3
P97086
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Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                     P97086;
P97086;
01-MAY-1997
01-MAY-1997
01-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q9EUR7;
                                                                                                                                     Submitted (FEB-1997) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: PREVENTS MISFOLDING AND PROMOTES THE REFOL PROPER ASSEMBLY OF UNFOLDED POLYPEPTIDES GENERATED U
CONDITIONS (BY SIMILARITY).
                                                                                                                                                                                                                                                                 Tsukamurella tyrosinosolvens.
Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
Corynebacterineae; Tsukamurellaceae; Tsukamurella.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
Heat-shock protein (Fragment)
                                EMBL; U90204; AAB49990.1; -.
HSSP; P06139; IGRL.
InterPro; IPR001844; Chaprnin Cpn60.
InterPro; IPR001242; Cpn60/TCP-1.
Pfam; PF00118; cpn60 TCP1; 1.
PRINTS; PR00298; CHAPERONIN60.
                                                                                                                                                                                                                                                                                                                protein).
                                                                                                                                                                                                                                                                                                                           Heat shock
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Streptomycineae;
NCBI_TaxID=1912;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Streptomyces hygroscopicus.
Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
                    PRINTS; PR00298; CHAPERONINGO PRINTS; PR00304; TCOMPLEXTCP1
                                                                                                     7 SUBUNITS (BY SIMILARITY).
                                                                                                                                                                                      procein
                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                    NCBI_TaxID=57704;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pfam; PF00118; cpn60 TCP1; 1. PRINTS; PR00304; TCOMPLEXTCP1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GROEL2.
        PROSITE; PS00296; CHAPERONINS_CPN60; 1.
                                                                                                                           -!- SUBUNIT: OLIGOMER OF 14 SUBUNITS COMPOSED OF TWO STACKED RINGS OF
                                                                                                                                                                                               "Tsukamurella tyrosinosolvens
                                                                                                                                                                                                          Zimmermann O., Pinkenburg O.,
                                                                                                                                                                                                                    STRAIN=IMMIB D-1411;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATP-binding; Chaperone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Martinez-Costa O.H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN=AF 141;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           InterPro; IPR002423; Cpn60/TCP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                            31
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 GPKGRNVVLEKKWGAP 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      l Similarity
                                                                                                                                                                                  60.";
                                                                                                                                                                                                                                                                                                                                                                                                                                            GPKGRNVVLEKKWGAP
                                                                                                                                                                                                                                                                                                                         7 (TrEMBLrel. 03, Created)
7 (TrEMBLrel. 03, Last sequence update)
2 (TrEMBLrel. 22, Last annotation update)
protein 60 (60 kDa chaperonin) (Protein Cpn60) (groEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 AA;
                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
Chaperone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Streptomycetaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6645 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Zalacain M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                            46
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    D200995F4199B7CA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 90;
Pred. No.
                                                                                                                                                                                               sp. nov. hsp60 gene
                                                                                                                                                                                                         Koechel
                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
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                                                                                                                                                  AND PROMOTES THE REFOLDING OLYPEPTIDES GENERATED UNDER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alkema W., Hol
tropic effects
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                                                                                                                                                                                                                                                                                                                                                                                   539 AA
                                                                                                                                                                                                          H.G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8.3e-08;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 61;
                                                                                                      FAMILY
                                                                                                                                                                                               for heat shock
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Streptomyces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               D., Malpartida
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0,
                                                                                                                                                               AND
                                                                                                                                                   STRESS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                73
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RESULT 4
Q9AFA5
ID Q9AFA5
ID Q9AFA5
ID 01-0
DT 01-0
DT
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Q93QI2
  RRRR OCCOUNT TO AC
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Best Local
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093012;
01-DEC-2001
01-DEC-2001
01-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSITE; PS00296; CHAPERONINS_CPN60; ATP-binding; Chaperone. SEQUENCE 540 AA; 56506 MW; 524E50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q9AFA5
Q9AFA5;
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                                                                                 Bacteria; Actinobacteria;
Corynebacterineae; Nocardi
NCBI_TaxID=43767;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; AF352578; AAK18614.1; -...
HSSP; P06139; IGKL.
InterPro; IPR001844; Chaprnin Con
InterPro; IPR0018423; Cpn60/TCF-1.
Pfam; P700118; cpn60/TCP1; 1.
PRINTS; PR00298; CHAPERONIN60.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence up
01-JCT-2002 (TrEMBLrel. 22, Last annotation
Heat shock protein 60 (60 kDa chaperonin) (1)
                                                                                                                                   Corynebacterium equii (Rhodococcus equi).
Bacteria; Actinobacteria; Actinobacteridae;
                                                                                                                                                                                                    großL protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRINTS; PR00298; CHAPERONIN60 PRINTS; PR00304; TCOMPLEXTCP1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tsukamurella paurometabola.
Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
Corynebacterineae; Tsukamurellaceae; Tsukamurella.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                protein).
STRAIN=ATCC6939;
Vanniasinkam T.,
                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       - I - SIMILARITY: BELONGS TO THE CHAPERONIN (HSP60) FAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7 SUBUNITS (BY SIMILARITY).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
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16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; ilarity 100.0%; Conservative 0,
                                                                                                                                                                                                       (TrEMBLrel. 19, Created)
(TrEMBLrel. 19, Last sequence update)
(TrEMBLrel. 23, Last annotation update)
in (60 kDa chaperonin) (Protein Cpn60).
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  Barton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Koechel H.G.;
                                                                                                                 Nocardiaceae;
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  M.D.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 90; DB 2;
Pred. No. 8.6e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 90; DB 2;
Pred. No. 8.5e-07;
    Heuzenroeder M.W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cpn60.
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                                                                                                                   Rhodococcus.
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                                                                                                                                        Actinomycetales;
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Result
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB
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Perfect score:
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Match
                                                                                                                                                                                                                                                                                                                     is the number of results predicted by chance to have a ater than or equal to the score of the result being printed, rived by analysis of the total score distribution.
                                                                                        100.0
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1: /SIDS1/gcqdata/m
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Gapop 10.0 , Gapext 0.5
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                                                                                                                                                                                                                                                                                                                                                                                            /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA198.DAT:
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AAU99964
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80.861 Million cell updates/sec
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Mycobacterium tube
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ABG/0//0	3000000	ABG70776	ABG70777	AAB31614	AAB31609	AAB03790	AAP80364	AAR64766	AAR64765	AAR04715	AAR04716	AAP80215	AAW32099	ABB73515	AAY23913	AAY23910	AAY14909	AAR67384	ABG74588	ABG74587	AAM50750	AAU76194	AAU76193	AAU76511	AAU76510	AAB31606	AAG81118	AAE11755	AAY93332	AAY23911	AAW44702	AAW32100	AAR81610	w	AAY23919	ABB73497	
BCG MBP65/mucant H		Hsp65/mitant	m/59as	acid		Heat shock protein	v	is 6	M. leprae 65 kDa p	Amino acid sequenc		Sequence of Mycoba	Mycobacteria sp. h		acid	acid	i sequer	leprae GroEL1		M. leprae 65kDa st		Mycobacterium tube	ę	M. tuberculosis 65		Amino acid sequenc	Mycobacterium tube	acteri	acid	Amino acid sequenc	Mycobacterium tube	Mycobacteria sp. h	۲.		seq	M vaccae GroßL hom	

ALIGNMENTS

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RESULT 1
AAY93329
  Peptide having a defined sequence is used in vaccines for conferring immunity against autoimmune disease or inflammatory disorders, especially arthritis -
                                              WPI; 2000-376486/32.
                                                                      Naparstek Y,
                                                                                                                  05-NOV-1998;
                                                                                                                                          04-NOV-1999;
                                                                                                                                                                                                                 Mycobacterium tuberculosis
                                                                                                                                                                                                                                      Epitope; heat shock protein 60; Hsp60; vaccine; autoimmune disease; inflammatory disorder; arthritis.
                                                                                                                                                                                                                                                                       Amino acid sequence of an epitope of heat shock protein
                                                                                                                                                                                                                                                                                                04-SEP-2000
                                                                                                                                                                                                                                                                                                                       AAY93329; ·
                                                                                                                                                                                                                                                                                                                                             AAY93329 standard; peptide;
                                                                                                                                                                  18-MAY-2000.
                                                                                                                                                                                          WO200027870-A1
                                                                                            (HADA-) HADASIT MEDICAL RES SERVICES & DEV.
                                                                                                                                                                                                                                                                                               (first entry)
                                                                     Ulmansky R,
                                                                                                                   98US-0107213.
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                                                                      Kashi Y;
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Matches 16; Conser
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                                                                              disease, infectious disease and graft rejection, and for diagnosing autoimmune and inflammatory disease including juvenile rheumatoid arthritis, type I diabetes, multiple sclerosis, systemic lupus erythematosus, inflammatory bowel disease, uveitis, thyroiditis and arteriosclerosis. This sequence represents a backbone cyclised peptianalogue of a heat shock protein.
                                                                                                                                                                    The invention relates to backbone cyclised peptide analogues or antagonists of heat shock protein (hsp). The analogues and antagonists are useful in the treatment of chronic inflammatory disease, autoimmune
                                                                                                                                                                                                                                                            New backbone cyclized the treatment of e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mycobacterium tuberculosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Heat shock protein; hsp; hsp60; chronic inflammatory disease; autoimmune disease; infectious disease; graft rejection; type I diabetes; juvenile rheumatoid arthritis; multiple sclerosis; uveitis; cycllc; systemic lupus erythematosus; inflammatory bowel disease; thyroiditis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-OCT-2002
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                                                        Sequence
                                                                                                                                                                                                                              Claim 5; Page 42; 50pp; English.
                                                                                                                                                                                                                                                                                                                                    Elias
                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mycobacterium tuberculosis hsp60 backbone cyclised peptide analogue
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAU99964 standard; Peptide; 16 AA.
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Score 90; DB 23;
Pred. No. 1.1e-08;
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RESULT 4
AAW60145
ID AAW6
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XX BY AC AAW6
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XX BY

25-AUG-1998

(first entry)

vaccae antigen GV-27A sequence

AAW60145;

AAW60145 standard; Protein;

0;

mycobacteria

infection; vaccine;

Mycobacterium vaccae; antigen; therapy; prevention; cytokine production; M. avium; M. tuberculosis; immune response enhancer; cell proliferation;

cancer.

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ARESULT 3
AAY93328
AID 3A289
AC AAY9
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                                                                                                                     Matches
                                                                                                                                                    Best Local
                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                            The present sequence represents an epitope of the heat shock protein 60 (Hsp60) of Mycobacterium tuberculosis. The peptide, and the nucleic acid encoding it, are useful in vaccines for conferring immunity against autoimmune disease or inflammatory disorders, especially arthritis. The peptide may also be used to raise antibodies, which are then used for passive immunisation.
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                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; Page 7; 58pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                especially arthritis -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Peptide having a defined sequence is used in vaccines for conferring immunity against autoimmune disease or inflammatory disorders,
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                                                        1 GPKGRNVVLEKKWGAP 16
                                                                                                                                                 Similarity
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Pred. No. 1.6e-08;
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Post-processing: Minimum Match 0%
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Listing first 45 summaries
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Maximum DB seq length: 200000000
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Gapop 10.0 , Gapext 0.5
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n2-6/ptodata/2/pubpaa/US09Ā PUBCOMB.pep:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARII

1 3 4 4 4 6 6 7 7 8 8 8 11 11 11 11 11 11 11 11 11 11 11	Result No.
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Sequence 2, Appli Sequence 117, App Sequence 117, App Sequence 117, App Sequence 117, App Sequence 33, Appli Sequence 114, App Sequence 114, App Sequence 6, Appli Sequence 4, Appli Sequence 40, Appli	Description

RESULT 2 US-09-847-637B-1 ; Sequence 1, Application US/09847637B

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US-09-276-455-10	9-415-849		9-493	-10-369-49	-369-493-18	-10-369-493-1621	0-369-493-15	0-156-761-12	0-369-493-1583	US-10-369-493-9597	-10-369-493	69-493-2309	US-10-369-493-17132	US-10-369-493-19756	69-493	0-369-493	US-10-369-493-2950	9-493	9-738-626	US-10-267-311-21	-059-	US-10-068-059-12	0-068-059-	0-068-059-	7-311-	0-267-311-	-10-369-493-	US-10-156-761-11465	US-10-051-643-160
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ALIGNMENTS

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RESULT 1

US-09-847-637B-2

Sequence 2, Application US/09847637B

Patent No. US20020150586A1

Patent No. US20020150586A1

REPLICANT: Naparstek, Yaakov

APPLICANT: Naparstek, Yaakov

ITILE OF INVENTION: NOVEL AMINO ACID SEQUENCES, DNA ENCODING

ITILE OF INVENTION: NOVEL AMINO ACID SEQUENCES, ANTIBODIES DIRECTED AGAINST SUCH

ITILE OF INVENTION: NOVELS AND THE DIFFERENT USES THEREOF

ITILE OF INVENTION: 13125-002001

CURRENT PILING DATE: 1920-10-05-02

PRIOR APPLICATION NUMBER: PC/IL99/00595

PRIOR APPLICATION NU
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US-10-205-979-41
Sequence 41, Application US/10205979
Distriction No. US20030147861A1
GENERAL INFORMATION:
APPLICANT: Watson, James D.
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Best Local Similarity luu.
16; Conservative
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SEQ ID NO 117
LENGTH: 215
TYPE: PRT
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Publication No. US20030007976A1
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SEQ ID NO 1
LENGTH: 22
TYPE: PRT
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APPLICANT: Watson, James D.
                                                                                                                                                                                                                                                                           Matches
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                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Mycobacterium vaccae -09-880-505-117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US 09/324,542
PRIOR FILING DATE: 1999-06-02
PRIOR APPLICATION NUMBER: US 08/997,080
PRIOR FILING DATE: 1997-12-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/847,637B
CURRENT FILING DATE: 2001-05-02
PRIOR APPLICATION NUMBER: PCT/IL99/00595
PRIOR FILING DATE: 1999-11-04
PRIOR APPLICATION NUMBER: 60/107,213
PRIOR FILING DATE: 1998-11-05
NUMBER OF SEQ ID NOS: 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILE REFERENCE: 11000.1007c2
CURRENT APPLICATION NUMBER: US/09/880,505
CURRENT FILING DATE: 2001-06-13
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APPLICANT: Kashi, Yechezkel
TITLE OF INVENTION: NOVEL AMINO ACID SEQUENCES, DNA ENC
TITLE OF INVENTION: THE AMINO ACID SEQUENCES, ANTIBODI
TITLE OF INVENTION: SEQUENCES AND THE DIFFERENT USES
FILE REFERENCE: 13125-002001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Tan, Paul L.J. APPLICANT: Prestidge, Ross
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ITLE OF INVENTION: Methods and Compounds for the Treatment ITLE OF INVENTION: of Immunologically-Mediated Skin Disorders
                                                                                                                                                                                                                                                                                            Local
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Watson, James D.
Tan, Paul L. J.
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100.0%; Pred. No. 1.0
tive 0; Mismatches
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ANTIBODIES DIRECTED AGAINST SUCH
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; ORGANISM: Mycobacterium vaccae
US-10-205-979-41
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                                                                                                                                                                                                                                                      US-10-267-311-33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; ORGANISM: Mycobacterium vaccae US-10-051-643-117
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CURRENT FILING DATE: 2002-07-25
PRIOR APPLICATION NUMBER: 60/308,446
PRIOR FILING DATE: 2001-07-26
NUMBER OF SEQ ID NOS: 52
SOPTWARE: PastSEQ for Windows Version 4.0
SEQ ID NO 41
                                                                                     GENERAL INFORMATION:
APPLICANT: Siegel, Marvin
APPLICANT: Chu, N. Randall
APPLICANT: Mizzen, Lee A.
TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
FILE REFERENCE: 12071/002001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOPTWARE: PastSEQ for Windows Version 3.0
SEQ ID NO 117
LENGTH: 215
                                                                                                                                                                                                             Sequence 33, Application US/10267311 Publication No. US20030050469A1
                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
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Best Local Similarity
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Watson, APPLICANT: Tan, Pa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: Compounds and Methods TITLE OF INVENTION: of Immune Responses FILE REFERENCE: 11000.1063U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: US 08/996,624 PRIOR FILING DATE: 1997-12-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/10/051,643
CURRENT FILING DATE: 2002-01-18
CRICK APPLICATION NUMBER: US09/156,181
PRIOR FILING DATE: 1998-09-17
PRIOR PILING DATE: 2002-10-09
PRIOR APPLICATION NUMBER: US/09/613,303
PRIOR FILING DATE: 2000-07-10
                                                  CURRENT APPLICATION NUMBER: US/10/267,311
CURRENT FILING DATE: 2002-10-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
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TITLE OF INVENTION: Methods and Compounds for the Treatment
ITTLE OF INVENTION: of Immunologically-Mediated Diseases o
ITTLE OF INVENTION: System using Mycobacterium Vaccae
FILE REFERENCE: 11000.1008c2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
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100.0%; Pred. No. 1.6e-06;
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Listing first 45 summaries
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length: 2000000000
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/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
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       GenCore version 5.1.6 (c) 1993 - 2003 Compugen Ltd
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  US-08-997-080-117
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US-09-324-542-117
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US-09-324-542-114
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US-09-324-542-114
US-09-326-346-1722-4
US-08-461-722-3
US-08-461-722-3
US-08-461-722-4
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Sequence 20, Appli
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Sequence 34, Appli
Sequence 16, Appli
Sequence 160, Appli
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Sequence 33, App
Sequence 114, App
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	US-08-466-248-32

US-08-997-080-117

ALIGNMENTS

Sequence 117, Application US/08997080 Patent No. 5968524

Patent No.

; MOLECULE TYPE: protein US-08-997-080-117 Query Match Best Local Similarity Matches INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS LENGTH: 215 amino aci GENERAL INFORMATION: APPLICANT: WATSON, APPLICANT: TAN, P REGISTRAȚION NUMBER: 37,007 REFERNCÉ/DOCKET NUMBER: 11(TELECOMMUNICATION INFORMATION: TELEPHONE: 206-269-0565 TELEPAX:+ 206-269-0563 COMPUTER: IBM Compatible OPERATING SYSTEM: DOS SOFTWARE: FastSEQ for Windows Version CURRENT APPLICATION DATA: ZIP: 98121 COMPUTER READABLE FORM: MEDIUM TYPE: Diskette ATTORNEY/AGENT INFORMATION: NAME: Sleath, Janet CLASSIFICATION: PRIOR APPLICATION DATA: APPLICATION NUMBER: FILING DATE: TITLE OF INVENTION: METHODS AND COMPOUNDS FOR THE TREATMENT OF IMMUNOLOGICALLY-NUMBER OF SEQUENCES: 194 CORRESPONDENCE ADDRESS: TOPOLOGY: lir LENGTH: 215 amino acids TYPE: amino acid APPLICATION NUMBER: US/08/997,080 FILING DATE: STREET: 2601 E COUNTRY: ADDRESSEE: Law Offices of Ann W. STREET: 2601 Elliott Avenue, Suit 16; WA USA Conservative WATSON, JAMES D. linear single PAUL 100.0%; Score 90; DB 2; 100.0%; Pred. No. 6.1e-08; 0 11000.1007 Mismatches Speckman te 4185 0 Length 215; 0 Gaps 0

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RESULT 3
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Best Local Similarity 100.
                                                                       Sequence 117, Application US/09095855
                                                          Patent No.
                                             GENERAL INFORMATION:
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ATTORNEY/AGENT INFORMATION:
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APPLICATION NUMBER: U
FILING DATE: June 12,
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                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: 11
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-269-0565
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                                 PPLICANT:
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SOFTWARE: FastSE(
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Sleath, Janet
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Tan, Paul
Visser, Elizabeth
Skinner, Margot
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ÆNTION: COMPOUNDS
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Visser, Elizabeth
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01 Elliott Avenue, Suite 4185
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100.0%; Pred. No.
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Query Match
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                                                                                                                                                                                                                            Sequence 117, Application US/09324542
Patent No. 6328978
GENERAL INFORMATION:
SEQ ID NO 117
                    SOFTWARE: FastSEQ for Windows Version 3.0
                                  EARLIER FILING DATE: 1997-12-23
NUMBER OF SEQ ID NOS: 194
                                                                     FILE REFERENCE: 11000.1007c1
CURRENT APPLICATION NUMBER: US/09/324,542
CURRENT FILING DATE: 1999-06-02
EARLIER APPLICATION NUMBER: US 08/997,080
                                                                                                                                          TITLE OF INVENTION: Methods and Compounds for the TITLE OF INVENTION: of Immunologically-Mediated Si
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                             APPLICANT: Watson, James D.
APPLICANT: Tan, Paul L.J.
APPLICANT: Prestidge, Ross
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER: 37,007
REFERENCE/DOCKET NUMBER: 11000.1002c3
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-269-0565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 23-DEC-1997
ATTORNEY/AGENT INFORMATION:
NAME: Sleath, Janet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: Law Offices of Ann W. Speckman
STREET: 2601 Elliott Avenue, Suite 4185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM Compatib
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Diskett
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 29-AUG-1996
APPLICATION NUMBER: 08/8
FILING DATE: 12-JUN-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE
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Pred. No. 6.1e-08;
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großLl protein - S
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65K antigen mbaA - Mycobacterium bovis (;Species: Mycobacterium bovis C;Species: Mycobacterium bovis C;Species: Mycobacterium bovis C;Date: 28-Oct-1992 #sequence_revision 28-Oct-1992 #text_change 26-Aug-1999 C;Accession: A43509 C;Accession: A43509 M.J.; Kolk, A.H.J.; Groothuis, D.G.; Berwald, L.G.; Tiesjema, R;Thole, J.S.R.; Keulen, W.J.; Kolk, A.H.J.; Groothuis, D.G.; Berwald, L.G.; Tiesjema, Infect. Immun. 55, 1466-1475, 1987
A;Title: Characterization, sequence determination, and immunogenicity of a 64-kilodalto A;Reference number: A43509; MUID:87193155; PMID:3553003
                                                                                                                                                                                                                                   RESULT 2
A43509
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C;Genetics:
A;Gene: groEL2; Rv0440
C;Superfamily: chaperonin groEL
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A;Title: The 65-kilodalton antigen of Mycobacterium tuberculosis.
A;Reference number: A26950; MUID:87137260; PMID:3029018
A;Accession: A26950
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N;Alternate names: 65K antigen
A;Accession: A43509
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A; Residues: 1-540 <SHI>
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H37Rv
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Pred. No. 1.3e-06;
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                                              immunogenicity of a 64-kilodalto
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C;Accession: C41325
R;Mazodier, P.; Guglielmi, G.; Davies, J.; Thompson, C.J.
J. Bacteriol. 173, 7382-7386, 1991
A;Title: Characterization of the groEL-like genes in Streptomyces albus.
A;Reference number: A41325; MUID:92041639; PMID:1682304
A;Accession: C41325
RESULT 5
                                                                                                                                                                                                                                                                                                                 R;Colston, X.Y.Z.; McConnell, X.Y.Z.; Bujdoso, R. submitted to the EMBL Data Library, August 1993
A;Description: Cloning and expression of Mycobacterium A;Reference number: S40245
A;Accession: S40245
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A; Residues: 1-541 < COL>
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C;Species: Mycobacterium paratuberculosis
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C;Genetics:
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A; Residues: 1-540 < MAZ>
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N;Alternate names: heat shock protein großL homolog 2
C;Species: Streptomyces albus
C;Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 26-Aug-1999
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C;Superfamily: chaperonin groEL
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A;Molecule type: DNA
A;Residues: 1-540 <THO>
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                                                                                                                                                                                                                     Superfamily: chaperonin großL
                                                                                                                                                                                                                                        Cross-references: EMBL:X74518; NID:g438180; PIDN:CAA52630.1; PID:g438181
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Best Local :
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Pred. No. 1
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Pred. No. 1.3e-06;
; Mismatches 0;
                                                                                                                                                Mismatches
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                                                                                                                                                                   1.3e-06;
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                                                                                                                                                                                  Length 541;
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chaperonin 60K [imported] - Mycobacterium leprae N;Alternate names: heat shock protein Gro&L-2

88.5%;

Score 77;

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Length 538;

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R.James, K.D.; Parkhill, J.; Barrell, B.G.; Rajandream, M.A. submitted to the EMBL Data Library, January 1998
A;Reference number: Z22831
A,Accession: T44725
                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 7
H72367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C;Accession: A25902
R;Mehra, V.; Sweetser, D.; Young, R.A.
Proc. Natl. Acad. Sci. U.S.A. 83, 7013-7017, 1986
A;Title: Efficient mapping of protein antigenic determine A;Reference number: A25902; MUID:86313701; PMID:2428046
A;Accession: A25902
                                                                                                                                                                Nature 399, 323-329, 1999
A;Title: Evidence for lateral gene transfer between Archaea and A;Reference number: A72200; MUID:99287316; PMID:10360571
A;Accession: H72367
                                                                                                                                                                                                                                                                                                             groEL protein - Thermotoga maritima (strain MSB8)
C;Species: Thermotoga maritima
C;Date: 11-Jun-1999 #sequence_revision 11-Jun-1999 #text_change 21-Jul-2000
C;Accession: H72367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Molecule type: DNA
A; Residues: 1-588 <MEH>
C; Superfamily: 'chaperon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A/Gene: groEL-2
C/Superfamily: chaperonin groEL
C/Keywords: molecular chaperone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Cross-references: EMBL:AL035159; PIDN:CAA22689.1
A;Experimental source: cosmid B1450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C;Species: Mycobacterium leprae
C;Date: 21-Jan-2000 #sequence_rc
C;Accession: T44725
R;James, K.D.; Parkhill, J.; Bar
                                                                                                                                                                                                                                                                                            R;Nelson,
                                           C;Genetics:
                                                          A; Experimental source: strain MSB8
                                                                                                   A;Residues:
                                                                                                                                                                                                                                                                          Garrett, M.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C;Date: 02-Jun-1988 #sequence_revision
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C/Species:
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                                                                                A;Cross-references: GB:AE001727; GB:AE000512; NID:g4981015; PIDN:AAD35591.1;
                                                                                                                       A; Molecule type: DNA
Superfamily:
                                                                                                                                            Status: preliminary
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                       TM0506
                                                                                                                                                                                                                                                                          K.E.; Clayton,
M.M.; Stewart, 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mycobacterium leprae
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                                                                                                                                                                                                                                                                          , R.A.; Gill, S.R.; Gwinn, M.L.; Dodson, R.J.; Haft, D.H.; Hicke A.M.; Cotton, M.D.; Pratt, M.S.; Phillips, C.A.; Richardson, D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%;
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB
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      Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score
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1 parascardov
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7 gardnerella
8 bifidobacte
6 scardovia i
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,	P51349 porphyra pu	Q57002 synechococc	Q9kj23 lactobacill	Q9amj8 anabaena sp	O33659 streptomyce	. Q9xca9 rhodothermu		Q8r5x7 fusobacteri	050305 bacillus ha	P30717 clostridium	Q8ru00 brevibacill	P28598 bacillus su	

ALIGNMENTS

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Oy 1 VVLEKKWGAPTITNDG 16	Query Match 100.0%; Best Local Similarity 100.0%; Matches 16; Conservative	KW Chaperone; ATP-binding; Multigene family. FT INIT MET 0 BY SIMILARIT SQ SEQUENCE 476 AA; 50529 MW; 760F81793F	DR PRINTS; PRO02304; TCOMPLEXTCO: DR PROSITE; PS00296; CHAPERONINS	•	HSSP; HAMAP Inter			CC between the Swiss Institute of Bioinformatics Institute.		CC -!- SUBCELIULAR LOCATION Cytoplasmic (By	<u>÷</u>		-i-	RT "Streptomyces lividans groES, gro	de Leon P., Marco		RP SEQUENCE FROM N.A.	Streptomycineae; NCBI_TaxID=1916;		មួន	(Rel. 41, Last	(Rel. 40, Crea) (Rel. 40, Last	ID CH62 STRLI STANDARD; AC 033658;	SULT 1 62_STRLI
6	; Score 87; DB 1; Length 476; ; Pred. No. 3.9e-07; 0; Mismatches 0; Indels 0; Gaps 0;	rigene family. BY SIMILARITY. W; 760F81793F4FED4D CRC64;	P1. NS_CPN60; 1.	1. 1. CP-1.	1. in Cpn60.	license agreement (See http://www.isb-sib.ch/announce/license@isb-sib.ch).	ong as its content is in no oved. Usage by and for commerc	between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its	the convertable. It is produced through a collaboration	LOCATION: Cytoplasmic (By similarity). Belongs to the chaperonin (HSP60) family.	SUBUNIT: Oligomer of 14 subunits composed of two stacked rings of	lded polypeptides generated under stress tv).	and promotes the refolding	S, groEL1 and groEL2 genes.";	as C., Marina A., Carrascosa J.L.,	87235;		Streptomycetaceae; Streptomyces.	Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;		annotation update) n Con60 2) (GroEL2 protein).	sequence update)	PRT; 476 AA.	

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VVLEKKWGAPTITNDG

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CH62 MYCT
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DT 01-0
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Best Local
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HSSP; P06139; 1GRL.
HAMAP; MF 00600; -; 1.
InterPro; IPR001844; Chaprnin Cpn60.
InterPro; IPR002423; Cpn60/TCP-1.
Pfam; P700118; Cpn60 TCP-1; 1.
PFRNTS; PR00296; CHAPERONIMG.
PRINTS; PR00304; TCOMPLEXTCP1.
PRO03TE; PR00296; CHAPERONINS_CPN60; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-SEP-2003 (Rel.
60 kDa chaperoni
                      P06806; Q48920; Q48931;
O1-JAN-1988 (Rel. 06, Created)
O1-OCT-1996 (Rel. 34, Last sequence update)
O1-OCT-1996 (Rel. 32, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
60 kDa chaperonin 2 (Protein Cpn60-2) (groEL protein 2) (65 kDa antigen) (Heat shock protein 65) (Cell wall protein A) (Antigen A).
GROLZ OR GROEL-2 OR GROEL-2 OR HSP65 OR RV0440 OR MT0456 OR MTV037.04.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CH60_TSUTY
P97086;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (FEB-1997) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: Prevents misfolding and promotes the refolding proper assembly of unfolded polypeptides generated under
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Bacteria; Actinobacteria; Actinobact
Corynebacterineae; Tsukamurellaceae;
                                                                                                                                             MYCTU
                                                                                                                                                                                                                                                                                                                      Chaperone;
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         the European Bioinformatics Institute. The use by non-profit institutions as long a modified and this statement is not removed. entities requires a license agreement (See )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein 60.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Zimmermann O., Pinkenburg O., "Tsukamurella tyrosinosolvens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GROL OR GROEL OR HSP60.
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 Mycobacterium bovis.
              Mycobacterium tuberculosis,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         conditions (By similarity).
SUBUNIT: Oligomer of 14 subunits composed of two stac SUBUNITS (By similarity).
SUBCELLULAR LOCATION: Cytoplasmic (By similarity).
SIMILARITY: Belongs to the chaperonin (HSP60) family.
                                                                                                                                MYCTU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SWISS-PROT entry is copyright. It is produced through a collaboration sen the Swiss Institute of Bioinformatics and the EMBL outstation
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                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                  VVLEKKWGAPTITNDG
                                                                                                                                                                                                                                                                                                                    ATP-binding.
539 AA; 56137 MW;
                                                                                                                                                                                                                                                           Conservative
                                                                                                                             STANDARD;
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42, Last sequence update)
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42, Last annotation update)
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Pred. No. 4.5
0; Mismatches
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sp. nov. hsp60
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Gordon S.V., Bigimeler K., Gas S., Barry C.B. III, Tekaia F.,
Badcock K., Basham D., Brown D., Chillingworth T., Connor R.,
Davies R., Devlin K., Feltwell T., Gentles S., Hamlin N., Holroyd
Hornsby T., Jagels K., Krogh A., McLean J., Moule S., Murphy L.,
Oliver S., Osborne J., Quail M.A., Rajandream M.A., Rogers J.,
Rutter S., Seeger K., Skelton S., Squares S., Squares R.,
Sulston J.E., Taylor K., Whitehead S., Barrell B.G.;
"Deciphering the biology of Mycobacterium tuberculosis from the
complete genome sequence.";
Nature 393:537-544(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
SPECIES=M.Bovis; STRAIN=BCG;
MEDLINE=87,193155; PubMed=3553003;
Thole J.B.R., Keulen W.J., Kolk A
Tiesjema R.H., van Embden J.D.A.;
                                                                                                                                                                                                                                  Kapur V., Li L.L., Hamrick M.R., Plikaytis B.
Telenti A., Jacobs W.R. Jr., Banerjee A., Col
Clarridge J.E., Kreiswirth B.N., Musser J.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SPECIES-M. Tuberculegis; STRAIN-CDC 1551 / Oshkosh; SPECIES-M. Tuberculegis; STRAIN-CDC 1551 / Oshkosh; Fleischmann R.D., Alland D., Eisen J.A., Carpenter L., White Contactor of DeBov R., Dodson R., Gwinn M.L., Haft D., Hickey
                                          "Detection and identification of mycobacteria by Rinsho Byori 43:155-161(1995).
                                                                                          SPECIES=M.cumeacumer.
MEDLINE=95214306; PubMed=7699930;
                                                                                                                                                                      "Rapid Mycobacterium species assignment and unambiguous identification of mutations associated with antimicrobial in Mycobacterium tuberculosis by automated DNA sequencing arch. Pathol. Lab. Med. 119:131-138 (1995).
                                                                                                                                                                                                                                                                               SPECIES=M.bovis, and M.tuberculosis; STRAIN=TMC MEDLINE=95150784; PubMed=7848059;
                                                                                                                                                                                                                                                                                                                                                                SPECIES=M.bovis, and Ros C., Belak K.;
                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE OF 45-195
                                                                                                                                                                                                                                                                                                                                                                                                                                          64-kilodalton protein of Mycobacterium Bscherichia coli K-12.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Submitted (APR-2001) to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bishai W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Peterson J., DeBoy R., Dodson R., Gwinn M.L., Haft D., Hic
Kolonay J.F., Nelson W.C., Umayam L.A., Ermolaeva M.D., St
Delcher A., Utterback T., Weidman J., Khouri H., Gill J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SPECIES=M.tuberculosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Corynebacterineae; Mycobacteriaceae; Mycobacterium NCBI_TaxID=1773, 1765;
                                                                                                                          SPECIES=M.tuberculosis;
                                                                                                                                                                                                                                                                                                                 SEQUENCE OF 63-182 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                 Submitted (MAY-1996) to the EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE=87137260;
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                                                                           Katsuyama T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Characterization, sequence determination,
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FUNCTION: Prevents misfolding and promotes proper assembly of unfolded polypeptides ge conditions (By similarity).
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                                                                                                                                         64-177 FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                             55:1466-1475(1987)
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PubMed=3029018;
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                                                                                                                                                                                                                                                                                                                                                                                M.tuberculosis;
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                                                                                               Furuwatari
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                                                                PCR-RFLP method.";
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                                 refolding
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(۱)
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Post-processing: Minimum Match 0%
Maximum Match 100%
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1: sp_archea:*
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87
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160.171 Million cell updates/sec
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sp_lant:*
sp_rodent:*
sp_virus:*
sp_virus:*
sp_mclassified:*
sp_mclassified:*
sp_bacteriap:*
sp_bacteriap:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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81	81	82	87	87	87	87	87	87	87	87	87	87	87	87	87	Score	
93.1	93.1	94.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	. –	0]# *
548	547	533	549	548	548	548	548	542	541	541	541	540	539	61	59	Length	
16	16	N	N	N	N	N	N	N	N	N	N	N	N	N	N	BB	
QBNM64	Q8CY22	Q9FDS2	Q8GAR9	Q8G8X0	Q8G923	Q8GAR7	Q8GAR8	Q9AFC5	Q9KGW1	Q9AFA6	Q93QI2	Q9AFA5	P97086	Q9EUR7	Q9EWD1	ID	
Q8nm64	Q8cy22	Q9fds2 p	-	_	Q8g923 m		Q8gar8 m	Q9afc5 n	Q9kgw1 m	٠.	Q93qi2 c	Q9afa5 t	P97086 t	Q9eur7 s	Q9ewdl s	Description	
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RESULT 2

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72.4	72.4	72.4	72.4	72.4	72.4	73.6	73.6	73.6	73.6	73.6	73.6	73.6	74.7	75.9	75.9	75.9	77.0	77.0	78.2	78.2	•	78.2	79.3		79.3	79.3	80.5	80.5
329	329	329	329	191	82	532	532	531	531	531	531	531	545	546	545	352	543	539	545	543	539	539	582	541	538	537	541	537
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ALIGNMENTS

망	Ş	Вер Ма	SO	3 2	뮸	另	DR	DR	검	감	₽	RC	RP	2	28	88	88	G G	DE	T	ij	Ŋ,	Ã	ij	RESULT Q9EWD1
VVLEKKWGAPTITNDG	1 VVLEKKWGAPTITNDG 16	Query Match 100.0%; Score 87; DB 2; Length 59; Best Local Similarity 100.0%; Pred. No. 5e-07; Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	E 59 AA; (ATP-binding; Chaperone.	PRINTS; PRO0304; TCOMPLEXTCP1.	InterPro; IPR002423; Cpn60/TCP-1.	HSSP; P06139; 1AON.	0536; CAC19351.1;	<pre>submitted (OCT-1999) to the EMBL/GenBank/DDBJ databases.</pre>	th pleitropic effects on	ta O.H		SEQUENCE FROM N.A.	[1]		Strentomycineae: Strentomycetaceae: Strentomycecates;	Streptomyces coelicolor.	GROEL2.	protein (Fragment).	(TrEMBLrel. 20, Last annotation	(TrEMBLrel. 16,	01-MAR-2001 (TrEMBLrel. 16, Created)		O9EWD1 PRELIMINARY; PRT; 59 AA.	LT 1

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RESULT 3
P97086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OCCONDITION OF THE PROPERTY OF
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   문
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Best Local S
Matches 16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "A cold-shock-like gene with pleitropic effects on Strey antibiotic biosynthesis.";
Submitted (OCT-1999) to the EMBL/GenBank/DDBJ databases EMBL; AJ250537; CAC19355.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Streptomycineae; Streptomycetaceae; Streptomyces.
NCBI_TaxID=1912;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            O_PURT,
O_PURT
                                                                                                                                                                                                                                                                                     01-MAY-1997 (TrEMBLrel. 03, Created)
01-MAY-1997 (TrEMBLrel. 03, Last sequence update)
01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
Heat shock protein 60 (60 kDa chaperonin) (Protein
                                                                                    InterPro; IPR001844; Chaprnin Cpn60.
InterPro; IPR002423; Cpn60/TCP-1.
Pfam; PF00118; cpn60 TCP1; 1.
PRINTS; PR00298; CHAPERONIN60.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN=IMMIB D-1411;
Zimmermann O., Pinkenburg O.,
"Tsukamurella tyrosinosolvens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tsukamurella tyrosinosolvens.
Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
Corynebacterineae; Tsukamurellaceae; Tsukamurella.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GROEL2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q9EUR7
                       PRINTS; PR00304; TCOMPLEXTCP1.
PROSITE; PS00296; CHAPERONINS_CPN60;
                                                                                                                                                                                                                               EMBL; U90204; AAB49990.1; HSSP; P06139; IGRL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=57704;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HSP60.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           P97086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pfam;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN=AF 141;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Heat-shock protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein 60.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATP-binding; Chaperone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   InterPro; IPR002423; Cpn60/TCP-1.
Pfam; PF00118; cpn60 TCP1; 1.
PRINTS; PR00304; TCOMPLEXTCP1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Martinez-Costa O.H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
Chaperone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6645 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (Fragment).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              52
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 87;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Koechel H.G.; sp. nov. hsp60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  539
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5.2e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 2;
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STRESS
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PARASOLT 4

PARASOLT 1

PARASO
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Q93QI2
RRR ROCCOGNETITION
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
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Q93Q12;
Q1-DEC-2001
01-DEC-2001
01-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Zimmermann O.S., Koechel H.G.;
"Tsukamurella paurometabola heat shock protein 60 (hsp60) gene.";
submitted (FEB-2001) to the EMBL/GenBank/DDBJ databases.
-I-FUNCTION; PREVENTS MISFOLDING AND PROMOTES THE REFOLDING AND
PROPER ASSEMBLY OF UNFOLDED POLYPEPTIDES GENERATED UNDER STRES
CONDITIONS (BY SIMILARITY).
-I-SUBUNIT: OLIGOMER OF 14 SUBUNITS COMPOSED OF TWO STACKED RINGS
-I-SUBUNITS (BY SIMILARITY).
-I-SUBUNITS (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09AFA5;
01-JUN-2001
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01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-JUN-2001 (TrEMBLrel. 22, Last annotation update)
Heat shock protein 60 (60 kDa chaperonin) (Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
                                                                                 Corynebacterineae; Nocardiaceae; Rhodococcus NCBI_TaxID=43767;
                                                                                                                                  Corynebacterium equii (Rhodococcus equi).
Bacteria; Actinobacteria; Actinobacterida
                                                                                                                                                                                 GROEL.
                                                                                                                                                                                                    groEL protein (60 kDa chaperonin)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATP-binding; Chaperone.
SEQUENCE 540 AA; 56506 MW;
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Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales.
Corynebacterineae; Tsukamurellaceae; Tsukamurella.
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                     STRAIN=ATCC6939;
                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSITE; PS00296; CHAPERONINS CPN60; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
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Vanniasinkam T.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VVLEKKWGAPTITNDG
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                                                                                                                                                                                                                             (Tremblrel. 19, Created)
(Tremblrel. 19, Last sequence update)
(Tremblrel. 23, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative (
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                                                                                                                                                                                                                                                                                                                      PRELIMINARY;
    Barton
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 87; DB 2; 100.0%; Pred. No. 5.2e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
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                                                                                                                                       Actinobacteridae; Actinomycetales;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
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  Heuzenroeder M.W.;
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Pred. No. 5.2e-06
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                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        524B5CDB2C49BF7C CRC64;
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                                                                                                                                                                                                      (Protein Cpn60)
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Maximum Match 10
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                                                                                                                                                                                                                                                                                                   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                      Score
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Gapop 10.0 , Gapext 0.5
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                                                           100.0
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Listing first 45 summaries
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Copyright (c) 1993 - 2003 Compugen Ltd
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/SIDSI/gcgdata/geneseq/geneseqp-embl/AA1993.DAT:

/SIDSI/gcgdata/geneseq/geneseqp-embl/AA1994.DAT:

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/SIDSI/gcgdata/geneseq/geneseqp-embl/AA1995.DAT:

/SIDSI/gcgdata/geneseq/geneseqp-embl/AA1997.DAT:

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AAU99965
AAY93328
AAY14892
AAY14892
ABB73498
AAB31615
AAW60144
AAY14891
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geneseqp-embl/AA1988.DAT:*
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Amino acid sequenc Mycobacterium tube Amino acid sequenc M. vaccae antigen Amino acid sequenc M vaccae GroEL hom Amino acid sequenc M. vaccae antigen Amino acid sequenc
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ABG70778			AAB31614			Þ	AAR64766				×									AAM50	AAU7619	AAU76					AAE11755					AAR 81	AAP813	AAY239	ABB73497
	Hsp65/mutant	Hsp65/m	Amino acid sequenc	Amino acid sequenc	Heat shock protein	M. leprae 65kD ant	M. tuberculosis 65	м. leprae 65 kDa p	Amino acid sequenc		Sequence of Mycoba	Mycobacteria sp. h	M vaccae GroEL hom	Amino acid sequenc	Amino acid sequenc	Ω		Ε.	M. leprae 65kDa st	Mycobacterium tube	Mycobacterium tube	Mycobacterium lepr	tuberculosis 6	M. leprae 65kDA st	Amino acid sequenc	Mycobacterium tube	acteri	acid	Amino acid sequenc	Mycobacterium tube	Mycobacteria sp. h	μ.		id sequ	M vaccae GroEL hom

ALIGNMENTS

04-SEP-2000 (first entry)

Amino acid sequence of an epitope of heat shock protein 60

AAY93330;

AAY93330 standard; peptide; 16

A

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RESULT 1
AAY93330
ID AAY9
ID AAY9
XX
AC AAY9
XX
O4-S
XX
Amin
XX
Epit
KW Epit
KW infl
KW infl
XX
XX
OS Myco
XX
PD 18-M
XX
XX
PD 18-M
XX
# X # X # X # X # X # X # #
                                                                                                                                       18-MAY-2000.
                                                                                                                                                                            Mycobacterium tuberculosis.
                                                                                                                                                                                              Epitope; heat shock protein 60; Hsp60; vaccine; autoimmune disease; inflammatory disorder; arthritis.
                                     WPI; 2000-376486/32.
                                                                                              05-NOV-1998;
                                                                                                                  04-NOV-1999;
                                                       Naparstek Y, Ulmansky R,
                                                                                                                                                          WO200027870-A1.
                                                                           (HADA-) HADASIT MEDICAL RES SERVICES &
                                                                                              98US-0107213.
                                                                                                                   99WO-IL00595.
                                                         Kashi Y;
                                                                             DEV.
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Peptide having a defined sequence is used in vaccines for conferring immunity against autoimmune disease or inflammatory disorders, especially arthritis -

Claim 3; Page 7; 58pp; English

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RESULT 2
AAU9965
ID 9A05
XX AAU9
AC AAU9
XX AAU9
XX Myco
XX Myco
XX Heat
XW auto
XW Juve
XX Myco
XX L-I
XX Myco
XX Myc
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Query Match
Best Local S
Matches 16
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Best Local Similarity
Matches 16; Conserv
                                                                                                                                                               The invention relates to backbone cyclised peptide analogues or antagonists of heat shock protein (hsp). The analogues and antagonists are useful in the treatment of chronic inflammatory disease, autoimmune disease, infectious disease and graft rejection, and for disgnosing autoimmune and inflammatory disease including juvenile rheumatoid arthritis, type I disbetes, multiple sclerosis, systemic lupus erythematosus, inflammatory bowel disease, uveitis, thyroiditis and arteriosclerosis. This sequence represents a backbone cyclised peptide analogue of a heat shock protein.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Heat shock protein; hsp; hsp60; chronic inflammatory disease; autoimmune disease; infectious disease; graft rejection; type I diabetes; juvenile rheumatoid arthritis; multiple sclerosis; uveitis; cyclic; systemic lupus erythematosus; inflammatory bowel disease; thyroiditis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 5; Page 42; 50pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New backbone cyclized peptide analog of heat shock protein useful the treatment of e.g. autoimmune disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-557613/59
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-JUN-2002
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                             Similarity
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                                                                                                                16 AA;
Conservative
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                          100.0%; Score 87; DB 23; 100.0%; Pred. No. 4e-08;
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Pred. No.
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                                                     Length 16;
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RESULT 3
AAY93328
ID AAY9
XX
AC AAY9
XX
RESULT 4
AAW60145
ID AAW6
ID AAW6
XX AAW6
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                                                                                                                                                                                                                                                           Query Match
Best Local
                                                                                                                                                                                                                                                                                                                  The present sequence represents an epitope of the heat shock protein 60 (Hsp60) of Mycobacterium tuberculosis. The peptide, and the nucleic acid encoding it, are useful in vaccines for conferring immunity against autoimmune disease or inflammatory disorders, especially arthritis. The peptide may also be used to raise antibodies, which are then used for passive immunisation.
                                                            M. vaccae antigen GV-27A sequence
                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                              especially arthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Epitope; heat shock protein 60; Hsp60; vaccine; autoimmune disease; inflammatory disorder; arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Amino acid sequence of an epitope of heat shock protein 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAY93328;
                                                                                     25-AUG-1998
                                                                                                            AAW60145;
                                                                                                                                     AAW60145 standard;
                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; Page 7; 58pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                           Peptide having a defined sequence is used in vaccines for conferring immunity against autoimmune disease or inflammatory disorders,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2000-376486/32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Naparstek Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-NOV-1998;
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                                                                                                                                                                                                                                                          Similarity
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                                                                                     (first entry
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                                                                                                                                                                                                                                                                                             AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99WO-IL00595
                                                                                                                                     Protein; 215
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                                                                                                                                                                                                                                                          Score 87; DB 21;
Pred. No. 5.8e-08;
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Mycobacterium vaccae; antigen; therapy; prevention; cytokine production; M. avium; M. tuberculosis; immune response enhancer; cell proliferation;

0

tuberculosis; immune response enhancer; infection; vaccine; cancer.

mycobacteria infection;

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Minimum DB seq length: 0
Maximum DB seq length: 200000000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Scoring table:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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87
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145.229 Million cell updates/sec
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Published Applications AA:*
|: /cgn2_6/ptodata/2/pubpaa/US07
/ Cgm2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*
/ Cgm2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
/ Cgm2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
/ Cgm2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
/ Cgm2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
/ Cgm2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
/ Cgm2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
/ Cgm2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
/ Cgm2_6/ptodata/2/pubpaa/US09B_PUBCOMB.pep:*
/ Cgm2_6/ptodata/2/pubpaa/US09B_PUBCOMB.pep:*
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/ Cgm2_6/ptodata/2/pubpaa/US09B_PUBCOMB.pep:*
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Copyright (c) 1993 - 2003 Compugen Ltd.
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARI

10 11 12 13 14 15) J G G & B B B B B B B B B B B B B B B B B	Result
87 87 87 87 87	87 87 87 87 87 87	Score
100.0	100.0	Query Match Length
523 540 540 541	215 215 215 295 295	Length I
115	154210	BG
US-10-051-643-114 US-09-847-637B-6 US-09-712-363-169 US-10-267-311-4 US-10-046-649-3 US-10-046-649-4 US-09-880-505-160 US-10-205-979-40	US-09-847-637B-3 US-09-847-637B-1 US-09-880-505-117 US-10-205-979-41 US-10-251-643-117 US-10-267-311-33 US-09-880-505-114	ID
Sequence 114, App Sequence 6, Appli Sequence 169, App Sequence 4, Appli Sequence 3, Appli Sequence 4, Appli Sequence 160, App Sequence 40, Appl		Description

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15	12	11	11	15	12	12	12	12	12	12	12	12	12	12	12	12	15	12	10	15	14	14	14	14	15	15	12	15	14
US-10-267-311-51	US-10-369-493-20184	US-09-276-455-10	US-09-415-849-1	US-10-046-649-2	-369-	US-10-369-493-19756		US-10-369-493-20873	0-369-493	US-10-369-493-20276	US-10-369-493-16217	US-10-369-493-15468	0-369	-10-369-493-	-10-369-493-2309	-10-369-493-	US-10-156-761-12526	0-369-493-2	-738-626-6	7-311-	-068	-059-	-059-	890-0	0-267-311-	US-10-267-311-17	US-10-369-493-8322	US-10-156-761-11465	US-10-051-643-160
Sequence 51, Appl	201	Sequence 10, Appl	1,	Sequence 2, Appli	10	_		20873	e 513, Ap	20276,			15838,	Sequence 9597, Ap	e 23094,	17132,	Sequence 12526, A	e 2950,	6486	e 21	Sequence 6, Appli	e 12	е В,	e 10	e 29	e 17	e 8322	11465	Sequence 160, App

ALIGNMENTS

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RESULT 2
US-09-847-637B-1
; Sequence 1, Application US/09847637B
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                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 3
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Naparstek, Yaakov
APPLICANT: Ulmansky, Rina
APPLICANT: Ulmansky, Rina
APPLICANT: Kashi, Yechezkel
TITLE OF INVENTION: NOVEL AMINO ACID SEQUENCES, DNA ENCODING
TITLE OF INVENTION: THE AMINO ACID SEQUENCES, ANTIBODIES DIRECTED AGAINST SUCH
TITLE OF INVENTION: SEQUENCES AND THE DIFFERENT USES THEREOF
FILE REFERENCE: 13125-002001
CURRENT APPLICATION NUMBER: US/09/847,637B
CURRENT FILING DATE: 2001-05-02
PRIOR APPLICATION NUMBER: PC/IL99/00595
PRIOR APPLICATION NUMBER: 60/107,213
PRIOR PILING DATE: 1999-11-05
PRIOR FILING DATE: 1999-11-05
PRIOR FILING DATE: 1999-11-05
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SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 16
                                                                                                                                                                                                                                      ch 100.0%; Score 87; DB 10; l Similarity 100.0%; Pred. No. 1.3e-07. 16; Conservative 0; Mismatches 0.
                                                                                                                                                                    1 VVLEKKWGAPTITNDG 16
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                                        Sequence 41, Application US/10205979 Publication No. US20030147861A1 GENERAL INFORMATION:
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SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 117
LENGTH: 215
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SEQ ID NO 1
LENGTH: 22
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                                                                                                                                                                                                                                                                                                                                                                         -09-880-505-117
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CURRENT FILING DATE: 2001-06-13
PRIOR APPLICATION NUMBER: US 09/324,542
PRIOR FILING DATE: 1999-06-02
PRIOR APPLICATION NUMBER: US 08/997,080
PRIOR APPLICATION NUMBER: US 08/997,080
PRIOR FILING DATE: 1997-12-23
APPLICANT: Watson, James D. APPLICANT: Tan, Paul L. J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Tan, Paul L.J.

APPLICANT: Prestidge, Ross
TITLE OF INVENTION: Methods and Compounds for the Treatment
TITLE OF INVENTION: of Immunologically-Mediated Skin Disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 60/107,213
PRIOR FILING DATE: 1998-11-05
NUMBER OF SEQ ID NOS: 9
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CURRENT FILLING DATE: 2001-05-02
PRIOR APPLICATION NUMBER: PCT/IL99/00595
PRIOR FILING DATE: 1999-11-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Kashi, Yechezkel
TITLE OF INVENTION: NOVEL AMINO ACID SEQUENCES, DNA ENVITITLE OF INVENTION: THE AMINO ACID SEQUENCES, ANTIBODITITLE OF INVENTION: SEQUENCES AND THE DIFFERENT USES FILE REFERENCE: 13125-002001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Naparstek,
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100.0%; Pred. No. 1.8e-07;
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                                                                                                                                                                                                                                                  RESULT 6

/ ORGANISM: Mycobacterium vaccae
US-10-051-643-117
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Best Local Similarity 100.
Matches 16; Conservative
                                         APPLICANT: Siegel, Marvin
APPLICANT: Chu, N. Randall
APPLICANT: Mizzen, Lee A.
TITLE OF INVENTION: INDUCTION OF A TH1-LIKE
TOPERRENCE: 12071/002001
                                                                                                                                                                                         Sequence 33, Application US/10267311 Publication No. US20030050469A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PastSEQ for Windows Version 4.0
SEQ ID NO 41
LENGTH: 215
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Publication No.
                                                                                                                                                                     GENERAL INFORMATION:
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PRIOR FILING DATE: 1997-12-23
NUMBER OF SEQ ID NOS: 208
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CURRENT FILING DATE: 2002-07-25
PRIOR APPLICATION NUMBER: 60/308,446
PRIOR FILING DATE: 2001-07-26
                                   FILE REFERENCE: 12071/002001
CURRENT APPLICATION NUMBER: US/10/267,311
CURRENT FILING DATE: 2002-10-09
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TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/10/051,643
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TITILE OF INVENTION: Methods and Compounds for the Treatment
TITILE OF INVENTION: of Immunologically-Mediated Diseases o
TITLE OF INVENTION: System using Mycobacterium Vaccae
FILE REFERENCE: 11000.1008c2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILE REFERENCE: 11000.1063U
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                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
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ON NUMBER: US/09/613,303
TE: 2000-07-10
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Pred. No. 1.8e-06;
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US-08-997-080-117
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US-08-68-041-4
US-09-468-041-4
US-09-468-041-4
US-09-468-041-3
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Query Match 100.0%; Score 87; DB 2; Length 215; Best Local Similarity 100.0%; Pred. No. 3e-07; Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	INFORMATION FOR SEQ ID NO: 117: SEQUENCE CHARACTERISTICS: LENGTH: 215 amino acids TYPE: amino acid STRANDEDNESS: single TOPOLOGY: linear MOLECULE TYPE: protein US-08-997-080-117	CLASSIFICATION: PRIOR APPLICATION IDATA: APPLICATION NUMBER: FILING DATE: FILING DATE: FILING DATE: ATTORNEY/AGENT INFORMATION: ATTORNEY/AGENT INFORMATION: REGISTRATION NUMBER: 37,007 REFERENCE/DOCKET NUMBER: 11000.1007 TELECOMMUNICATION INFORMATION: TELECOMMUNICATION 1000RMATION:	STATE: WA COUNTRY: USA ZIP: 98121 COMPUTER READABLE FORM: MEDIUM TYPE: Diskette MEDIUM TYPE: Diskette COMPUTER: ISM Compatible OPERATING SYSTEM: DOS SOFTWARE: FastSEQ for Windows Version 2.0 CURRENT APPLICATION NUMBER: US/08/997,080 FILING DATE: FILING DATE:	RESULT 1 US-08-997-080-117 US-08-997-080-117 Sequence 117, Application US/08997080 ; Patent No. 596524 ; GENERAL INFORMATION: APPLICANT: WATSON, JAMES D. APPLICANT: TAIN, PAUL L.J. TITLE OF INVENTION: METHODS AND COMPOUNDS FOR THE TREATMENT OF IMMUNOLOGICALLY- NUMBER OF SEQUENCES: 194 CORRESPONDENCE ADDRESS: ADDRESSE: Law Offices of Ann W. Speckman STREET: 2601 Elliott Avenue, Suite 4185 CITY: Seattle	ALIGNMENTS	28 87 100.0 541 3 US-08-466-248-34 Sequence 34, Appl 29 87 100.0 541 4 US-09-324-542-160 Sequence 160, App 31 87 100.0 541 4 US-09-205-426-160 Sequence 160, App 31 87 100.0 648 4 US-09-613-303-17 Sequence 29, Appl 32 87 100.0 948 4 US-09-613-303-29 Sequence 21, Appl 34 66 75.9 548 3 US-08-432-697-31 Sequence 31, Appl 35 66 75.9 548 3 US-08-432-697-31 Sequence 31, Appl 36 72.4 547 4 US-09-107-532A-6684 Sequence 31, Appl 63 72.4 547 4 US-08-467-822-2 Sequence 2, Appli 63 72.4 547 4 US-08-461-722-2 Sequence 2, Appli 63 72.4 547 4 US-08-36-251-2 Sequence 2, Appli 63 72.4 547 4 US-08-36-251-2 Sequence 2, Appli 63 72.4 547 548 3 US-08-46-849 Sequence 2, Appli 63 72.4 547 548 3 US-09-46-041-2 Sequence 2, Appli 63 72.4 548 2 US-08-46-822-3 Sequence 2, Appli 63 72.4 548 3 US-08-46-822-3 Sequence 2, Appli 63 72.4 548 3 US-08-46-822-3 Sequence 32, Appli 64 65 72.4 548 3 US-08-46-822-3 Sequence 32, Appli 64 65 72.4 548 3 US-08-46-248-3 Sequence 32, Appli 64 65 72.4 548 3 U
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US-08-997-362-117

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Patent No. 59852

Application US/08997362

INFORMATION:

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RESULT 3
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SOFTWARE: PastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
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APPLICATION NUMBER: U
FILING DATE: June 12,
APPLICATION NUMBER: U
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REFERENCE/DOCKET NUMBER: 11
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-269-0565
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM CON OPERATING SYSTEM: SOFTWARE: FastSE
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                                                INFORMATION:
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2601 Elliott Avenue, Suite 4185
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Tan, Paul
Visser, Elizabeth
Skinner, Margot
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Visser, Elizabeth
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Sequence 117, Application US/09324542 Patent No. 6328978

GENERAL INFORMATION:

APPLICANT: Watson, James D. APPLICANT: Tan, Paul L.J. APPLICANT: Prestidge, Ross

SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 117 LENGTH: 215

EARLIER FILING DATE: 1997-12-23 NUMBER OF SEQ ID NOS: 194

EARLIER APPLICATION NUMBER: US 08/997,080

TITLE OF INVENTION: Methods and Compounds for the Treatment TITLE OF INVENTION: of Immunologically-Mediated Skin Disord FILE REFERENCE: 11000.1007c1
CURRENT APPLICATION NUMBER: US/09/324,542
CURRENT FILING DATE: 1999-06-02
CURRENT FILING DATE: 1999-06-02

Disorders

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; TOPOLOGY: linear; MOLECULE TYPE: protein US-09-095-855-117
US-09-324-542-117
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Best Local Similarity
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PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: 08/705,347
FILING DATE: 29-AUG-1996
APPLICATION NUMBER: 08/873,970
FILING DATE: 12-JUN-1997
                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 215 amino acid
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REFERENCE/DOCKET NUMBER: 11
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-269-0565
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FILING DATE: 23-DEC-1997
ATTORNEY/AGENT INFORMATION:
NAME: Sleath, Janet
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APPLICATION NUMBER: US/09/095,855
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ADDRESSEE: Law Offices of Ann W. Speckman
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MEDIUM TYPE: Diskett
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ALIGNMENTS

melanotropin beta - smaller spotted catshark C;Species: Scyliorhinus canicula (smaller spotted catshark, smaller spotted C;Date: 13-Jul-1981 #sequence_revision 13-Jul-1981 #text_change 23-Aug-1996 C;Accession: A01470 R;Love, R.M.; Pickering, B.T. Gen. Comp. Endocrinol. 24, 398-404, 1974 A;Title: A beta-MSH in the pituitary gland of the spotted dogfish (Scyliorhin A;Accession: A01470; MUID:75113445; PMID:4452470 A,Accession: A01470 dihydrolipoamide S-acetyltransferase (BC 2.3.1.12) - bovine (fragment) C;Species: Bos primigenius taurus (cattle) C;Date: 30-Apr-1991 #sequence_revision 30-Apr-1991 #text_change 05-May-2000 C;Accession: A37823 밁 A, Status: preliminary A, Molecule type: protein A, Residues: 1-17 < RAH> R;Rahmatullah, M.; Radke, G.A.; Andrews, P.C.; Roche, T.E. J. Biol. Chem. 265, 14512-14517, 1990 A;Title: Changes in the core of the mammalian-pyruvate dehydrogenase complex upon selec A;Reference number: A37823; MUID:90354445; PMID:2167319 A;Molecule type: protein A;Residues: 1-18 <LOV> C;Superfamily: corticotropin-lipotropin A; Accession: A37823 RESULT 1 Best Loc Matches ;Keywords: acyltransferase; ;Keywords: Query Match Matches Query Match Best Local Local H 12 KWGAP 16 hormone Similarity 5; Conserv Similarity 4; Conserv RWGAP GPKGR GPKGR 5 Conservative Conservative υı 15 100.0%; --24.6%; 23.8%; Score 29; 100.0%; Pred. No. coenzyme A Score 30; DB 1; Le Pred. No. 3.9e+02; 1; Mismatches 0; Mismatches DB 2; L. 5.2e+02; 0, Length 18; Length 17; Indels Indels 0; <u>,</u> (Scyliorhinus canicul Gaps Gaps dogfish) 0 0;

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melanotropin beta - horse
(;Species: Equus caballus (domestic horse)
(;Date: 13-Jul-1981 #sequence_revision 13-Jul-1981 #text_change 23-Aug-1996
(;Accession: A01467
(R;Dixon, J.S.; Li, C.H.
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                                                                                                                                                    C; Superfamily: corti
C; Keywords: hormone
                                                                                                                                                                                                                                A; Reference number: A01467
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A;Title: The isolation and structure of beta-melanocyte-stimulating
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A; Accession: A45913
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C;Species: Lactobacillus plantarum
C;Date: 14-May-1993 #sequence_revision 14-May-1993 #text_change 12-Sep-1997
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Pred. No. 9.2e+02
                                                                                                Score 27; DB 1;
Pred. No. 1.1e+03;
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A;Note: sequence extracted from NCBI backbone (NCBIP:112172) C;Superfamily: multicatalytic endopeptidase complex chain C9 C;Keywords: hydrolase
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R;Wood, D.W.; Setubal, J.C.; Kaul, R.; Monks, D.; Chen, L.; Wood, G.E.; Chen, erage, G.; Gillet, W.; Grant, C.; Guenthner, D.; Kutyavin, T.; Levy, R.; Li, M.; Karp, P.; Romero, P.; Zhang, S.; Karp, P.; Romero, P.; Zhang, S.; Science 294, 2317-2323, 2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Title: Induction of proteins in response to cold acclimation A;Reference number: S62893; MUID:96184500; PMID:8605981 A;Accession: S62893
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R;Yamashita, M;; Ojima, N.; Sakamoto, FEBS Lett. 382, 261-264, 1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cold-inducible protein, 70K - rainbow trout (fragment)
C;Species: Oncorhynchus mykiss (rainbow trout)
C;Date: 19-Mar-1997 #sequence_revision 24-Jul-1997 #text_change 24-Jul-1997
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C;Species: Bos primigenius taurus (cattle)
                                                                                                                           A,Title: The Genome of the Natural Genetic Engineer Agrobacterium tumefaciens C58
A,Reference number: AB2577; MUID:21608550; PMID:11743193
A,Accession: AI2846
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R;Dlok, L.R.; Moomaw, C.R.; Pramanik, B.C.; DeMartino, G.N.; Slaughter, C.A.
Biochemistry 31, 7347-7355, 1992
A;Tille: Identification and localization of a cysteinyl residue critical for the
A;Reference number: A42762; MUID:92378961; PMID:1510924
                                                                                                      A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                     hypothetical protein Atu2202 [imported] - Agrobacterium tumefaciens (strain C;Species: Agrobacterium tumefaciens C;Species: 11-Jan-2002 #sequence_revision 11-Jan-2002 #text_change 18-Nov-2002
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                                                     A; Residues: 1-22 < KUR>
                                                                             A; Molecule type:
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;Cross-references: GB:AE008688; PIDN:AAL43191.1; PID:g17740671; GSPDB:GN00186;Experimental source: strain C58 (Dupont)
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Gapop 10.0
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Match
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 GenCore version (c) 1993 - 2003
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TI11 SPIOL
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LEC2 ARTIN
ASL2 BACSE
LEC1 ARTIN
JAP2 RANJA
HGL2 FASHEE
PA2 DABRU
ACI THUAL
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MLB HORSE
MLA ANOCA
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Compugen Ltd.
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P18673
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spinacia
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methanobact
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maclura pom
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CH10_CLOPA
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15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	16.4
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PGK_CLOPA	AGI EUPMA	MMPX SOLTU	UC06 MAIZE	SAP2 ARBPU	LIGB_TRAVE	IDHP RAT	UP01 CAEEL	CEP1_ACHFU	BPP2 BOTJA	TKL1 LOCMI	DEF1_SPIOL
P81346	P33889	P80501	P80612	P11760	P20012	P56574	P55954	P22790	P01022	P16223	P81572
clostridium	euphorbia m		zea mays (m	arbacia pun	trametes ve	rattus norv	caenorhabdi		bothrops ja	locusta mig	spinacia ol

ALIGNMENTS

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Query Match
Best Local S
Matches 6
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P01206;

21-JUL-1986 (Rel. (

21-JUL-1986 (Rel. (

21-JUL-2001 (Rel. (
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15-JUL-1998 (Rel. 3
28-FEB-2003 (Rel. 4
10 kDa chaperonin
21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence update)
11-JUL-1986 (Rel. 01, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Melanotropin beta (Beta-MSH).
Scyllorhinus canicula (Spotted dogfish) (Spotted catshark).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Chondrichthyes;
Elasmobranchii; Galeomorphii; Galeoidea; Carcharhiniformes;
Scyllorhinidae; Scyllorhinus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chaperone.
NON TER
SEQUENCE
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STRAIN=W5;
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P81338;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HAMAP; MF_00580; -; 1.
InterPro; IPR001476; Chaprnin_Cpn10.
Pfam; PF00166; cpn10; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Electrophoresis 19:802-806(1998).
-!- FUNCTION: Binds to Cpn60 in the presence of Mg-ATP and suppresses the ATPase activity of the latter.
-!- SUBUNIT: Heptamer of 7 subunits arranged in a ring (By
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE=98291870; PubMed=9629918;
Flengerud R., Skjeldal L.;
"Two-dimensional gel electrophoresis separation and N-terminal sequence analysis of proteins from Clostridium pasteurianum W5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Clostridium pasteurianum.
Bacteria; Firmicutes; Clo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GROS OR GROES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE; PS00681; CHAPERONINS_CPN10; PARTIAL.

    -!- SUBCELLULAR LOCATION: Cytoplasmic (By similarity).
    -!- SIMILARITY: BELONGS TO THE GROES CHAPERONIN FAMILY

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=1501;
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6; Conserva
                                                                                                                                                                                                                                                                                             PLGDNVVIKK 14
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19 AA; 2026 MW;
                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                          STANDARD;
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36, Last sequence update)
41, Last annotation updat
(Protein Cpn10) (groES pr
                                                                                                                                                                                                                                                                                                                                                                                             25.4%;
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                                                                                                                                                                                                                                                                                                                                                                              Score 31; DB 1; Le
Pred. No. 1.8e+02;
2; Mismatches 2;
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(groES prote
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EC1 MACPO
D LECI MACPO
D LECI MACPO
D LECI MACPO
D LECI MACPO
AC P18675;
AC P18675;
DT 01-NOV-1990 (Rel. 16, Last sequence update)
DT 01-NOV-1991 (Rel. 19, Last annotation update)
DE Agglutinin beta-1 chain (MPA).
OS Maclura pomifera (Osage orange).
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosidae;
OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosidae;
                                                      SKERCERRERRE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-NOV-1990 (Rel. 16, Created)
01-NOV-1990 (Rel. 16, Last sequence update)
01-NUG-1991 (Rel. 19, Last annotation update)
Agglutinin beta-3 chain (MPA).
Maclura pomifera (Osage orange).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MACPO
                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                              -!- SUBUNIT: FORMED OF FOUR ALPHA CHAINS AND
-!- SIMILARITY: TO THE OTHER AGGLUTININ BETA
HSSP; P18676; 1JOT.
                                                                                                                                                                                                                                                                                                                                                                                                                                       polypeptide subunit.";
Arch. Biochem. Biophys. 270:596-603(1989).
-!- FUNCTION: D-GALACTOSB-SPECIFIC LECTIN, BINDS THE T-ANTIGEN
STRUCTURE GAL-BETA1-3-GALNAC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LEC3_MACPO P18677;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Love R.M., Pickering B.T.;
"A beta-MSH in the pituitary gland of the spotted dogfish (Scyliorhinus canicula): isolation and structure.";
Gen. Comp. Endocrinol. 24:398-404(1974).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Young N.M., Johnston R.A.Z., Szabo A.G., Watson D.C.; "Homology of the D-galactose-specific lectins from Artocarpus integrifolia and Maclura pomifera and the role of an unusual small
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PIR; A01470; MTDFBC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=75113445; PubMed=4452470;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE=89206218; PubMed=2705782;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE=Seed;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=3496;
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                                                                                                                                                                                                                                                                                                                                                                     20 AA; 2082 MW;
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80.0%;
                                                                                                                                                                                                                                                                                                               Score 28; DB Pred. No. 5.3e 5; Mismatches
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Pred. No. 2.4e+02;
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Melanotropin

(Beta-MSH).

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RESULT 5
                                                          MLB_HORSE
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Best Local S
Matches 7
                                                                                                                                                             Matches
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Best Local 8
MLB HORSE
P01202;
21-JUL-1986
21-JUL-1986
16-OCT-2001
                                                                                                                                                                                                                       Flagella.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FLA2_BARBA
P35634;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Arch. Biochem. Biophys. 270:596-603(1989).
-!- FUNCTION: D-GALACTOSE-SPECIFIC LECTIN, BINDS THE T-ANTIGEN STRUCTURE GAL-BETA1-3-GALMAC.
-!- SUBUNIT: FORMED OF FOUR ALPHA CHAINS AND FOUR BETA CHAINS.
-!- SIMILARITY: TO THE OTHER AGGLUTININ BETA CHAINS.
PIR; S03986; S03986.
HSSP; P18676; 1JOT.
                                                                                                                                                                                                                                           01-JUN-1994 (Rel.
01-JUN-1994 (Rel.
30-MAY-2000 (Rel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE-89206218; PubMed=2705782;
Young N.M., Johnston R.A.Z., Sabob A.G., W
"Homology of the D-galactose-specific lect
integrifolia and Maclura pomifera and the
                                                                                                                                                                                                                                                                                                                                                                                                          Bacteria; Proteobacteria; Alphaproteobacteria;
Bartonellaceae; Bartonella.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     polypeptide subunit.";
Arch. Biochem. Biophys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE=Seed;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=3496;
                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                 MEDLINE=94041612; PubMed=8225570;
Scherer D.C., Deburon-Connors I.,
                                                                                                                                                                                                                                                                                                                                                           SEQUENCE.
STRAIN=KC584;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Bartonella bacilliformis.
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                                                                                                                                                           Conservative
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Pred. No.
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Pred. No. 5.
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Gapop 10.0 , Gapext 0.5
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Q9upk4 homo sapien
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Matches 7
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
Chaperonin (Fragment).
Oryctolagus cuniculus (Rabbit).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
                                                                                                                                                                                                                                                                              seven related subunits.";
Proc. Natl. Acad. Sci. U.S.A. 90:11975-11979(1993).
SEQUENCE 18 AA; 1884 MW; B608F6EBB5A8A2A6 CRC64;
                                                                                                                                                                                                                                                                                                                         Rommelaere H., Van Troys M., Gao Y., Melki R., Cowan N.J.,
Vandekerckhove J., Ampe C.,
"Bukaryotic cytosolic chaperonin contains t-complex polypeptide 1 and
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003888 chlorogoniu	Q9ucf0 homo sapien	Q9s8d6 triticum ae	₽	Q9uci8 homo sapien	Q10748 clostridium	Q85645 mouse mamma	Q83410 mouse mamma	Q9s8t1 artocarpus	Q9uwi9 methanospir	homo s	. P83426 morus nigra	P83423 morus nigra	haloba	Q73487 human immun	Q9nld5 canis famil	Q29395 canis famil	Q9r4p5 brevundimon	Q9unf2 homo sapien	6 gallinı		Q90zv2 sarothr	ral	mus sp.	tachyp.	Q9ajg0 vibrio pela	7 human	Q73918 human immun	Q9prn3 petromyzon

ALIGNMENTS

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Q9UCK9 PRELIMINARY; PRT; 16 AA.
Q9UCK9 Q9UCK9
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
Serum amyloid A isotype 2 alpha protein (Serum amyloid A protein)
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Q9UPK4;
01-MAY-2000
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SEQUENCE FROM N.A.

Lamerdin J.B., McCready P.M., Skowronski B., Adamson A.W.,

Burkhart-Schultz K., Gordon L., Kyle A., Ramirez M., Stilwagen S.,

Bhan H., Velasco N., Do L., Regala W., Terry A., Garnes J.,

Poundstone P., Christensen M., Georgescu A., Avila J.,

Danganan L., Poundstone P., Christensen M., Georgescu A., Avila J.,

Liu S., Attix C., Andreise T., Trankheim M., Amico-Keller G.,

Coefield J., Duarte S., Lucas S., Bruce R., Thomas P., Quan G.,

Kronmiller B., Arellano A., Montgomery M., Ow D., Nolan M., Trong S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                      serine protease gene cluster.";
Submitted (JUL-1998) to the EMBL/GenBank/DDBJ databases.
EMBL; AC005321; AAC27374.1; -.
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
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--- SIMILARITY: BELONGS TO THE SAA FAMILY.
InterPro; IPRO00096; Serum amyloid A.
Pfam; PF00277; SAA proteins; 1.
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"Identification of two novel amyloid A protein subsets coexisting in
an individual partient of AA-amyloidosis.";
Biochim. Biophys. Acta 1180:195-200(1992).
-1- FUNCTION: MAJOR ACUTE PHASE REACTANT. APOLIPOPROTEIN OF THE HDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Coefield J., Duarte S., Lucas S., Bruce R., Thomas P., Quan G., Kronmiller B., Arellano A., Montgomery M., Ow D., Nolan M., Trong S. Kobayashi A., Olsen A.S., Carrano A.V., "Sequence analysis of a 3.5 Mb contig in human 19p13.3 containing a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPLEX (BY SIMILARITY).
-!- TISSUE SPECIFICITY: PLASMA, SYNTHESIZED
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                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
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Mammalia; Eutheria; Primates;
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                            PRELIMINARY;
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Catarrhini; Hominidae;
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                                                                                                                                                                                                                                                                                                                               DB 4;
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RESULT 6
Q9PRN2
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Q9AH71
ID Q9AH
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Q9AH71;
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                                                                                                            01-MAY-2000 (TrEMBLrel.
01-MAY-2000 (TrEMBLrel.
01-MAY-2000 (TrEMBLrel.
             NCBI_TaxID=7757;
                                     Petromyzontiformes;
                                                       Eukaryota; Metazoa;
                                                                     Petromyzon marinus
                                                                                            Corticotropin, ACTH.
                                                                                                                                                                        Q9PRN2;
                                                                                                                                                                                       Q9PRN2
                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kahler C.M., Blum E., Miller Y.K., Ry
"exl, an exchangeable genetic island
Infect. Immun. 69:1687-1696(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN=44/76;
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NCBI_TaxID=487;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bacteria; Proteobacteria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HmbR (Fragment).
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Yamashita M., Ojima N., Sakamoto T.;
"Induction of proteins in response t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NON TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=21116988; PubMed=11179344;
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                                                       (Sea lamprey).
; Chordata; Craniata; Vertebrata; Hyperoartia;
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                                     Petromyzontidae;
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46.7%;
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Last
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L; Mismatches
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Neisseria meningitidis.";
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Maximum Match 100%
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Perfect score:
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1: /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1980.DAT:*

2: /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1982.DAT:*

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4: /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1983.DAT:*
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SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1988.DAT:

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Copyright (c) 1993 - 2003 Compugen Ltd.
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SIDS1/gcgdata/geneseq/geneseqp-embl
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result			Length	BG	Ħ	Description
р.	122	100.0	22	21	AAY93328	Amino acid sequenc
N	90	73.8		21	AAY93329	Amino acid sequenc
ω	90	73.8	16	23	AAU99964	Mycobacterium tube
4	87	71.3	16	18	AAW43458	Mycobacteria sp. h
رن ن	87	71.3	16	21	AAY93330	Amino acid sequenc
6	87	71.3	16	23	AAU99965	Mycobacterium tube
7	83	68.0	15	17	AAR94779	Peptide from libra
8	83	68.0	15	18	AAW43457	Mycobacteria sp. h
9	82	67.2	16	17	AAR94780	Peptide from libra

Peptide having a defined sequence is used in vaccines immunity against autoimmune disease or inflammatory diespecially arthritis -

disorders,

4 U	4	2 (4	42	41	40	39	38	37	36	35	34	ü	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	
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AAR80261	AANO4097	3394697	AARR4696	AAR57460	AAR57459	AAR48529	AAR48528	AAR44840	AAR21809	AAR21808	AAU90668	AAW10515	AAR69354	AAW10516	AAR87908	ABG42785	AAM33173	AAM72948	AAM60314	ABB39610	ABG54657	AAW43455	AAR94777	AAW43460	AAE26843	AAB88279	AAW68089	AAP91037	AAB88269	27	AAW43456	AAR94778	AAU99966	w	AAR94781	AAW43459	
Anti-parasitic rac	- +						Lactoferrin derive	toferrin-rel	i microbial	Anti microbial pep	Insulin/insulin-li		Bovine lactoferrin	Lactoferrin derive	10		Peptide #7210 enco			Peptide #7116 enco	epti	gp.	libr	Mycobacteria sp. h	Anabaena variabili	Hsp-65 peptide epi	in T-c	acids 10	peptide	æ	Mycobacteria sp. h	Peptide from libra	cteriu	id se	Peptide from libra	Mycobacteria sp. h	

ALIGNMENTS

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RESULT 1
AAY93328
Mycobacterium tuberculosis.
                                                                                                                                                                                                          Epitope; heat shock protein 60; Hsp60; vaccine; autoimmune disease; inflammatory disorder; arthritis.
                                                                                                                                                                                                                                                            04-SEP-2000 (first entry)
                                                                                                                                                                                                                                                                                                       AAY93328 standard; peptide;
                                       WPI; 2000-376486/32.
                                                           Naparstek Y, Ulmansky R,
                                                                                                    05-NOV-1998;
                                                                                                                         04-NOV-1999;
                                                                                                                                              18-MAY-2000.
                                                                                                                                                                 WO200027870-A1.
                                                                                                                                                                                                                                        Amino acid sequence of an epitope of heat shock protein
                                                                                                                                                                                                                                                                                  AAY93328;
                                                                               (HADA-) HADASIT MEDICAL RES SERVICES & DEV.
                                                                                                    98US-0107213.
                                                                                                                         99WO-IL00595.
                                                            Kashi Y;
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RESULT 2
AAY93329
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Best Local S
Matches 22
                                              Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present sequence represents an epitope of the heat shock protein 60 (Hep60) of Mycobacterium tuberculosis. The peptide, and the nucleic acid encoding it, are useful in vaccines for conferring immunity against autoimmune disease or inflammatory disorders, especially arthritis. The peptide may also be used to raise antibodies, which are then used for passive immunisation.
                                                                                                                    The present sequence represents an epitope of the heat shock protein 60 (Hsp60) of Mycobacterium tuberculosis. The peptide, and the nucleic acid encoding it, are useful in vaccines for conferring immunity against autoimmune disease or inflammatory disorders, especially arthritis. The peptide may also be used to raise antibodies, which are then used for passive immunisation.
                                                                                                                                                                                                                                      Peptide having a defined sequence is used in vaccines for conferring immunity against autoimmune disease or inflammatory disorders, especially arthritis -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Epitope; heat shock protein 60; Hsp60; vaccine; autoimmune disease; inflammatory disorder; arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-SEP-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; Page
                                                                                                Sequence
                                                                                                                                                                                                                Claim 2; Page 7;
                                                                                                                                                                                                                                                                                        WPI; 2000-376486/32.
                                                                                                                                                                                                                                                                                                                                                                  05-NOV-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mycobacterium tuberculosis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAY93329;
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22; Conserv
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                   GPKGRNVVLEKKWGAP 16
GPKGRNVVLBKKWGAP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sequence
                                                                                                  16 AA;
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                                              73.8%; llarity 100.0%; Conservative
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                                                                                                                                                                                                                                                                                                                                                                  98US-0107213
                                                                                                                                                                                                                                                                                                                                                                                            99WO-IL00595
                                                                                                                                                                                                                58pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              of an epitope of heat shock protein 60
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 16
                                                                                                                                                                                                                                                                                                                 Kashi
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                                                            Score 90;
Pred. No.
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Pred. No. 3.
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                                                  Mismatches
                                                            DB 21; I
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3.9e-13;
es 0;
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                                                   Indels
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RESULT 4
AAW43458
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AAU9994
ID AAU99
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Best Local S
Matches 16
Heat shock protein; hsp58; autoimmune disease; hsp65; vaccine; rheumatoid arthritis; antigen; infectious disease; prophylactipristane induced arthritis; PIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to backbone cyclised peptide analogues or antagonists of heat shock protein (hsp). The analogues and antagonists are useful in the treatment of chronic inflammatory disease, autoimmune disease, infectious disease and graft rejection, and for diagnosing autoimmune and inflammatory disease including juvenile rheumatoid arthritis, type I diabetes, multiple sclerosis, systemic lupus erythematosus, inflammatory bowel disease, uveitis, thyroiditis and entide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAU99964 standard; Peptide; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mycobacterium tuberculosis.
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systemic lupus erythematosus; inflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Heat shock protein; hsp; hsp60; chronic inflammatory disease; autoimmune disease; infectious disease; graft rejection; type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mycobacterium tuberculosis hsp60 backbone cyclised
                                                                                                                                                                         08-APR-1998
                                                                                                                                                                                                                                                                                       AAW43458 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          analogue of a heat shock protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       arteriosclerosis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  the treatment
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-DEC-2000; 2000IL-0140233
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                                                                                                                   Mycobacteria
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                   gp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  of e.g.
                                                                                                                      hsp68 derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This sequence represents a backbone cyclised peptide
                                                                                                                                                                                                                                                                                          peptide;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     73.8%; Score 90; 100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  peptide analog of heat shock protein useful
autoimmune disease -
                                                                                                                                                                                                                                                                                             16
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                                                                                                                   peptide
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                                                                                                                      (group
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                                                                                                                        1 #8).
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                                        prophylactic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      type
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Polypeptide(s) derived from microbial heat shock protein - for treatment of autoimmune disease esp. arthritis
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Naparstek Y,
                                                                                                                                                                                                                      Amino acid sequence of an epitope of heat shock protein 60
                                                                                                                                                                                                                                                                          AAY93330;
                                                                                                                                                                                                                                                                                                   AAY93330 standard; peptide; 16 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  arthritis.
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                                                    05-NOV-1998;
                                                                            04-NOV-1999;
                                                                                                      18-MAY-2000.
                                                                                                                               WO200027870-A1
                                                                                                                                                         Mycobacterium tuberculosis.
                                                                                                                                                                                             Epitope; heat shock protein 60; Hsp60; vaccine;
                                                                                                                                                                                                                                                 04-SEP-2000
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                          (HADA-) HADASIT MEDICAL RES SERVICES & DEV.
                                                                                                                                                                                inflammatory
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                disorder; arthritis.
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 Ulmansky R,
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 Kashi Y;
                                                                                                                                                                                                                                                                                                                                                                                                                      0,
                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 87; Pred. No.
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                                                                                                                                                                                               autoimmune disease;
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RESULT 6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    nucleic acid encoding it, are useful in vaccines for conferring immunity against autoimmune disease or inflammatory disorders, especially arthritis. The peptide may also be used to raise antibodies, which are then used for passive immunisation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Heat shock protein; hsp; hsp60; chronic inflammatory disease; autoimmune; disease; infectious disease; graft rejection; type I diabet juvenile rheumatoid arthritis; multiple sclerosis; uveitis; cyclic; systemic lupus erythematosus; inflammatory bowel disease; thyroiditis.
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                                                     erythematosus,
                                                                                                        disease, infectious disease and graft rejection, and for diagnosing autoimmune and inflammatory disease including juvenile rheumatoid
                                                                                                                                                                    The invention relates to backbone cyclised peptide analogues or antagonists of heat shock protein (hsp). The analogues and antagonists are useful in the treatment of chronic inflammatory disease, autoimmune
                                                                                                                                                                                                                                                                                   Claim 5; Page 42; 50pp; English.
                                                                                                                                                                                                                                                                                                                                               the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-DEC-2001; 2001WO-IL01144.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mycobacterium tuberculosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       arteriosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mycobacterium tuberculosis hsp60 backbone cyclised peptide analogue #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAU99965;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAU99965 standard; Peptide; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2000-376486/32
                          arteriosclerosis.
                                                                             arthritis, type I diabetes,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (PEPT-) PEPTOR LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-DEC-2000; 2000IL-0140233.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local
                                                                                                                                                                                                                                                                                                                                      backbone cyclized peptide analog of heat shock treatment of e.g. autoimmune disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ш
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VVLEKKWGAPTITNDG 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Avron A,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               71.3%; Score 87; DB ilarity 100.0%; Pred. No. 1. Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                  e I diabetes, multiple sclerosis, systemic inflammatory bowel disease, uveitis, thyro
                          This sequence represents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Senderowitz H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ₿
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                                backbone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 16;
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                                                           thyroiditis and
                                cyclised peptide
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analogue of a heat shock protein.

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RESULT 8
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Best Local S
Matches 15
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Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                       AAR94773-R94878 are overlapping peptides of a library spanning the whole of microbial hsp65 (heat shock protein 65). Eleven antigens were prepared from the library and used to immunise mice, after 10 days the mice received injections of pristane to induce arthritis and the animals examined for incidence of arthritis. A preferred anti-arthritic peptide was found to correspond to residues 21-31 of full length hsp65 (see AAR94772). Peptides contg. this sequence are used in the diagnosis, treatment and prophylaxis (may be used in a vaccine) of autoimmune diseases such as rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR94779 standard; peptide; 15
            AAW43457 standard; peptide; 15 AA.
                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                              Example 1; Figure 1; 88pp; English.
                                                                                                                                                                                                                                                                                                                                               Polypeptide derived from bacterial heat shock protein 65 - for use in diagnosis, prophylaxis and treatment of auto-immune disease e.g.
                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1996-200888/20
                                                                                                                                                                                                                                                                                                                                                                                                         Elson CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27-SEP-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-APR-1996.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hsp; heat shock protein; Mycobacterium bovis; microbial; diagnosis; rheumatoid arthritis; autoimmune disease; treatment; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-NOV-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR94779;
                                                                                                                                                                                                                                                                                                                                    rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                 (PEPT-) PEPTIDE THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16;
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                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VVLEKKWGAPTITNDG
                                                                      GPKGRNVVLEKKWGA 15
                                                                                      GPKGRNVVLBKKWGA 15
                                                                                                                                                                                                                                                                                                                                                                                                         Thompson SJ
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                                                                                                                                                                   15 AA;
                                                                                                                    Conservative
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                                                                                                                                68.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      spanning whole of hsp65.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16
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                                                                                                                                Score 83; pred. No.
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                                                                                                                      Mismatches
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7.6e-07;
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                                                                                                                                           Length 15;
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ARBSULT 9
AAR9470
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                    diseases and is linked to pristane induced arthritis (PIA) in vitro, however heat shock proteins and peptides derived from microbial sources may act as self antigens and thus have limited clinical use. The human hsp65 homologue, hsp58, or fragments of the hsp58 protein (see AAW14948-W14950) may be useful in the development of vaccines for prophylaxis or treatment of an autoimmune disease such as rheumatoid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This peptide is one of a library (see AAW43451-W43556) which represents the mycobacterial heat shock protein, hsp65 and is designed to study a novel method for the treatment of ordinmune disease e.g. rheumatoid arthritis. This fragment has been allocated as a group 1 peptide which is composed of the fragments found in AAW43451 to AAW43460. Mycobacterial hsp65 is known to be an immunodominant antigen in a number of infectious
                                                             Hsp; heat shock protein; Mycobacterium bovis; microbial; diagnosis; rheumatoid arthritis; autoimmune disease; treatment; vaccine;
                                                                                                                                                                          AAR94780;
                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Polypeptide(s) derived from microbial heat shock protein for treatment of autoimmune disease esp. arthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1997-212851/19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Heat shock protein; hsp58; autoimmune disease; hsp65; vaccine; rheumatoid arthritis; antigen; infectious disease; prophylactic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mycobacteria sp. hsp68 derived peptide (group 1 #7).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAW43457;
                                                                                                          Peptide from library spanning whole of hsp65.
                                                                                                                                           11-NOV-1996
                                                                                                                                                                                                       AAR94780 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Fig la; 91pp; English.
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                                                                                                                                                                                                                                                                                                           1 GPKGRNVVLEKKWGA 15
                                                                                                                                                                                                                                                                                                                                                l Similarity
                                                                                                                                                                                                                                                                                    GPKGRNVVLEKKWGA 15
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                                                                                                                                                                                                                                                                                                                                                                                                             15 AA;
                                                                                                                                                                                                                                                                                                                                                 Conservative
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                                                                                                                                                                                                         peptide; 16
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RESULT 10
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Matches 15
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 Polypeptide(s) derived
                                                                                                                                                                                                                                               Heat shock protein; hsp58; autoimmune disease; hsp65; vaccine; rheumatoid arthritis; antigen; infectious disease; prophylacti
                                                                                                                                                                                                                                                                                     Mycobacteria sp. hsp68 derived peptide (group 1 #9).
                                                                                                                                                                                                                                                                                                             08-APR-1998
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                                                                                                                                                                                                                                                                                                                                                              AAW43459 standard; peptide; 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Polypeptide derived from bacterial heat shock protein 65 - for use in diagnosis, prophylaxis and treatment of auto-immune disease e.g. rheumatoid arthritis.
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                         WPI; 1997-212851/19
                                                                                                 27-SEP-1995;
                                                                                                                        26-SEP-1996;
                                                                                                                                                03-APR-1997
                                                                                                                                                                         WO9711966-A1
                                                                                                                                                                                                 Mycobacteria
                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                     pristane induced arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; Figure 1; 88pp; English.
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                                                                          (PEPT-) PEPTIDE THERAPEUTIC LTD
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                                                  Thompson JS
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                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                 95GB-0019737
                                                                                                                        96WO-GB02382
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from microbial heat shock protein -
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   useful
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ARESULT 11
ARAP94781
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XX ITPUM
XX IPP
XX YOPH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
AAR94773-R94878 are overlapping peptides of a library spanning the whole of microbial hap65 (heat shock protein 65). Eleven antigens were prepared from the library and used to immunise mice, after 10 days the mice received injections of pristane to induce arthritis and the animals examined for incidence of arthritis. A preferred anti-arthritic peptide was found to correspond to residues 21-31 of full length hsp65 (see AAR94772). Peptides contg. this sequence are used in the diagnosis, treatment and prophylaxis (may be used in a vaccine) of autoimmune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This peptide is one of a library (see AAW43451-W43556) which represents the mycobacterial heat shock protein, hsp65 and is designed to study a novel method for the treatment of autoimmune disease e.g. rheumatoid arthritis. This fragment has been allocated as a group 1 peptide which is composed of the fragmente found in AAW43451 to AAW43460. Mycobacterial hsp65 is known to be an immunodominant antigen in a number of infectious diseases and is linked to pristane induced arthritis (PIA) in vitro, however heat shock proteins and peptides derived from microbial sources may act as self antigens and thus have limited clinical use. The human hsp65 homologue, hsp58, or fragments of the hsp58 protein (see AAW14948-W1950) may be useful in the development of vaccines for prophylaxis or treatment of an autoimmune disease such as rheumatoid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           prophylaxis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-NOV-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                              Example 1; Figure 1; 88pp; English.
                                                                                                                                                                                                                                                                                                                                                         in diagnosis, prophylaxis and rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                              Polypeptide derived from bacterial heat shock protein 65 - for in diagnosis, prophylaxis and treatment of auto-immune disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1996-200888/20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Elson CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-SEP-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rheumatoid arthritis; autoimmune disease; treatment; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hsp; heat shock protein; Mycobacterium bovis; microbial; diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Peptide from library spanning whole of hsp65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR94781 standard; peptide; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (PEPT-) PEPTIDE THERAPEUTICS LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               for treatment of autoimmune disease esp. arthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11 KKWGAPTITNDG 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  l Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Thompson
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         94GB-0019553.
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100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            English
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                                                                                                                                                                                                                                                                                                                                                                                           treatment
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 18; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 15;
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ARSSULT 12
AAY93331
ID AAY93
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AC AAY94
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RESULT 13
AAU99966
ID AAU99
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AC AAU99
XX
AC AAU99
XX
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Best Local S
Matches 11
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Best Local S
Matches 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       immunity against autoimmune disease or inflammatory disorders, especially arthritis. The peptide may also be used to raise antibodies, which are then used for passive immunisation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present sequence represents an epitope of the heat shock protein 60 (Hsp60) of human origin. The peptide, and the nucleic acid encoding it, are useful in vaccines for conferring
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Peptide having a defined sequence is used in vaccines for conferring immunity against autoimmune disease or inflammatory disorders, especially arthritis -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Naparstek Y, Ulmansky R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WC200027870-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Amino acid sequence of an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAY93331;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                diseases such as rheumatoid arthritis.
     07-OCT-2002
                                                       AAU99966;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 4; Page 7; 58pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2000-376486/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-MAY-2000.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Epitope; heat shock protein 60; Hsp60; vaccine; autoimmune disease; inflammatory disorder; arthritis.
                                                                                                         AAU99966 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (HADA-) HADASIT MEDICAL RES SERVICES &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11 KKWGAPTITNDG
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                                                                                                                                                                                                                                                                                                                                      Similarity
8; Conserv
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                                                                                                                                                                                                                                                               VVLEKKWGAPTITNDG 22
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                                                                                                                                                                                                                                     VIIEQSWGSPKVTKDG 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                             20 AA;
                                                                                                                                                                                                                                                                                                                                         Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
     (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98US-0107213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99WO-IL00595.
                                                                                                         Peptide;
     entry)
                                                                                                                                                                                                                                                                                                                                                              48.4%;
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91.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      epitope of heat shock protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kashi Y;
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                                                                                                                                                                                                                                                                                                                                      Score 59; DB 21;
Pred. No. 0.011;
5; Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 65; DB 17;
Pred. No. 0.00075;
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                                                                                                                                                                                                                                                                                                                                                                                        Length 20;
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                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
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                                                                                                                                                                                                                                                                                                                                      Gaps
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The invention relates to backbone cyclised peptide analogues or antagonists of heat shock protein (hsp). The analogues and antagonists are useful in the treatment of chronic inflammatory disease, autoimmune disease, infectious disease and graft rejection, and for diagnosing
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                                                                                                      Sequence
                                                                                                                                                                                 autoimmune and inflammatory disease including juvenile rheumatoid arthritis, type I diabetes, multiple sclerosis, systemic lupus erythematosus, inflammatory bowel disease, uveitis, thyroiditis are arteriosclerosis. This sequence represents a backbone cyclised per
                                                                                                                                                          analogue
                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 5; Page 42; 50pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New backbone cyclized peptide analog of heat shock protein useful the treatment of e.g. autoimmune disease {}^{-}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2002-557613/59.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Elias D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-DEC-2000; 2000IL-0140233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11-DEC-2001; 2001WO-IL01144.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mycobacterium tuberculosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          arteriosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mycobacterium tuberculosis hap60 backbone cyclised peptide analogue #3.
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                                                                                                                                                                of a heat shock protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Avron A,
                                                                                                         20 AA;
Conservative
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                      48.4%;
  5
Score 59; DB 23;
Pred. No. 0.011;
5; Mismatches 3
  3,
                                                   Length 20;
                                                                                                                                                                                                                         systemic lupus
tis, thyroiditis and
     Indels
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                                 Local Similarity hes 8; Conserv
N
                 7 VVLEKKWGAPTITNDG 22
VIIEQSWGSPKVTKDG 17
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RESULT 14
AAR94778
ID AAR94
XX
rheumatoid arthritis; prophylaxis.
                                                                                      Hsp; heat shock protein; Mycobacterium bovis; microbial; diagnosis;
                                                                                                      Peptide from library spanning whole of hsp65.
                                                                                                                        11-NOV-1996
                                                                                                                                                        AAR94778 standard; peptide; 16
                                                                                                                        (first entry)
                                                                                autoimmune disease; treatment;
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04-APR-1996.

WO9610039-A1

Synthetic.

27-SEP-1995;

95WO-GB02295

27-SEP-1994;

94GB-0019553

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Query Match
Best Local Similarity
Matches 11; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR94773-R94878 are overlapping peptides of a library spanning the whole of microbial hsp65 (heat shock protein 65). Eleven antigens were prepared from the library and used to immunise mice, after 10 days the mice received injections of pristane to induce arthritis and the animals examined for incidence of arthritis. A preferred anti-arthritic peptide was found to correspond to residues 21-31 of full length hsp65 (see AAR94772). Peptides contg. this sequence are used in the diagnosis, treatment and prophylaxis (may be used in a vaccine) of autoimmune diseases such as rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Heat shock protein; hsp58; autoimmune disease; hsp65; vaccine; rheumatoid arthritis; antigen; infectious disease; prophylactic; pristane induced arthritis; PIA.
                                                 Polypeptide(s) derived from microbial heat shock protein for treatment of autoimmune disease esp. arthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mycobacteria sp. hsp68 derived peptide (group 1 #6).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAW43456;
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Disclosure; Fig la; 91pp; English
                                                                                                                                                                                  Elson CJ,
                                                                                                                                                                                                                                                                                            27-SEP-1995;
                                                                                                                                                                                                                                                                                                                                              26-SEP-1996;
                                                                                                                                                                                                                                                                                                                                                                                                    03-APR-1997.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
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                                                                                                                                                                                                                                        (PEPT-) PEPTIDE THERAPEUTIC LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mycobacteria sp.
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100.0%; Pred. No. 0.
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유 성

This peptide is one of a library (see AAW43451-W43556) which represents the mycobacterial heat shock protein, hsp65 and is designed to study

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                                                                                     Matches
                                                                                                         Query Match 46.7%; Score 57; Best Local Similarity 100.0%; Pred. No.
                                                                                                                                                                                                                                                               a novel method for the treatment of autoimmune disease e.g. rheumatoid arthritis. This fragment has been allocated as a group 1 peptide which is composed of the fragments found in AAW43451 to AAW43460. Mycobacterial hap65 is known to be an immunodominant antigen in a number of infectious diseases and is linked to pristane induced arthritis (PIA) in vitro, however heat shock proteins and peptides derived from microbial sources may act as self antigens and thus have limited clinical use. The human hap65 homologue, hap58, or fragments of the hap58 protein (see AAW14948-W14950) may be useful in the development of vaccines for the AAW14948-W14950) may be useful in the development of vaccines for
                                                                                                                                                                           Sequence
                                                                                                                                                                                                                           prophylaxis or treatment of an autoimmune disease such as rheumatoid arthritis.
                                                                                     11; Conservative
                                        1 GPKGRNVVLEK 11
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0.017;
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Search completed: December 30, 2003, 16:23:46
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/cgn2_6/ptodata/2/pubpaa/USO6 NEW FUB.pep:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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Sequence 56, Appl	TIGGA 'c actanbac	radic s sousans	Semience 12 April	Sequence 3, Appli	Sequence 241, App	Sequence 241, App	ς.	Sequence 241, App	Sequence 1136, Ap	Sequence 44019, A	Sequence 4, Appli	Sequence 3, Appli	Sequence 2, Appli	Sequence 1, Appli	Description

RESULT 2 US-09-847-637B-2

Sequence

2, Application US/09847637B

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e 15,	e 228,	e 80	e 322	е 6,	e 15	e 23	е 6,	Sequence 70, Appl	e 21	Sequence 5, Appli	e 68,	e 16,	Sequence 36, Appl	35,	e 34,	33,	Sequence 229, App	228,	61,	64,	100	ω '	439, Ap	e 20	e 68,	Sequence 50, Appl	e 50,	e 14,	sequence 54, Appl

ALIGNMENTS

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US-09-847-637B-1
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TYPE: PRT
; ORGANIEM: Mycobacterium tuberculosis
US-09-847-637B-1
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SOPTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1
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                                                                                                 Query Match 100.0%; Score 122; DB 10; Best Local Similarity 100.0%; Pred. No. 3.6e-12; Matches 22; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                             FILE REFERENCE: 13125-002001
CURRENT APPLICATION NUMBER: US/09/847,6378
CURRENT FILING DATE: 2001-05-02
PRIOR APPLICATION NUMBER: PCT/IL99/00595
PRIOR FILING DATE: 1999-11-04
PRIOR APPLICATION NUMBER: 60/107,213
PRIOR FILING DATE: 1998-11-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Naparstek, Yaakov
APPLICANT: Ulmansky, Rina
APPLICANT: Kashi, Yechezkel
APPLICANT: Kashi, Yechezkel
TITLE OF INVENTION: NOVEL AMINO ACID SEQUENCES, DNA ENCODING
TITLE OF INVENTION: THE AMINO ACID SEQUENCES, ANTIBODIES DIRECTED AGAINST SUCH
TITLE OF INVENTION: SEQUENCES AND THE DIFFERENT USES THEREOF
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; ORGANISM: Mycobacterium tuberculosis
US-09-847-637B-2
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                                                                                            RESULT 4
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TYPE: PRT
; ORGANISM: Mycobacterium tuberculosis
US-09-847-637B-3
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              Sequence 4, Application US Patent No. US20020150586A1 GENERAL INFORMATION:
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SEQ ID NO 3
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                                                                                                                                                                                                                                                                       Query Match
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PRIOR FILING DATE: 1999-11-04
PRIOR APPLICATION NUMBER: 60/107,213
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APPLICANT: Ulmansky, Rina
APPLICANT: Ulmansky, Rina
APPLICANT: Kashi, Yechezkel
TITLE OF INVENTION: NOVEL AMINO ACID SEQUENCES, DNA ENCODING
TITLE OF INVENTION: THE AMINO ACID SEQUENCES, ANTIBODIES DIRECTED AGAINST SUCH
TITLE OF INVENTION: SEQUENCES AND THE DIFFERENT USES THEREOF
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TITLE OF INVENTION: THE AMINO ACID SEQUENCES, ANTIBODI
TITLE OF INVENTION: SEQUENCES AND THE DIFFERENT USES
FILE REFERENCE: 13125-002001
APPLICANT: Naparstek, Yaakov
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NUMBER OF SEQ ID NOS: 9
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CURRENT APPLICATION NUMBER: US/09/847,637B
CURRENT FILING DATE: 2001-05-02
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PRICR FILING DATE: 1998-11-05
NUMBER OF SEQ ID NOS: 9
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PRIOR APPLICATION NUMBER: PCT/IL99/00595
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APPLICANT: Kashi, Yechezkel
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PPLICANT: Naparstek, Yaakov
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                                                      Application US/09847637B
                                                                                                                                                                                                                            71.3%; Score 87; ilarity 100.0%; Pred. No. Conservative 0; Mismatc
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Kashi, Yechezkel
TITLE OF INVENTION: NOVEL AMINO ACID SEQUENCES, DNA ENCODING
TITLE OF INVENTION: THE AMINO ACID SEQUENCES, ANTIBODIES DIRECTED AGAINST SUCH
TITLE OF INVENTION: SEQUENCES AND THE DIFFERENT USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Penn, Sharron G. APPLICANT: Rank, David R.
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NUMBER OF SEQ ID NOS: 9
                                                               PRIOR
                                                                                                     PRIOR APPLICATION NUMBER: PCT/US01/00668
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00663
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PRIOR APPLICATION NUMBER: PCT/US01/00664
PRIOR FILING DATE: 2001-01-30
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                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: PCT/US01/00667
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                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: PCT/US01/00666
                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: US 60/236,359
                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: GB 24263.6 PRIOR FILING DATE: 2000-10-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 2000-08-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: US 09/632,366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: US 60/180,312 PRIOR FILING DATE: 2000-02-04
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILE REFERENCE: 13125-002001
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                    APPLICATION NUMBER: PCT/US01/00661
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FILING DATE: 2001-01-30
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Hanzel, David K.
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seq length: 22
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1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*
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                 GenCore version 5.1.6 (c) 1993 - 2003 Compugen Ltd.
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US-07-755-161A-1
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US-07-891-174-2
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US-08-224-487-2
US-08-256-771-23
US-08-256-771-23
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Sequence 11, Appl Sequence 11, Appl Sequence 11, Appl Sequence 2, Appli Sequence 22, Appli Sequence 23, Appl Sequence 241, Appl Sequence 3, Appl Sequence 3, Appl Sequence 63, Appl Sequence 54, Appl Sequenc
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US-09-500-124-228	US-08-030-410-1	US-08-602-999A-228	US-08-584-043A-80	US-08-440-861-50	US-09-336-643A-70	US-09-289-942A-5	US-08-985-492-16	US-09-598-419-229	US-09-598-419-228	US-09-620-412C-229	US-09-620-412C-228	US-09-556-877-229	US-09-556-877-228	US-08-687-590-67	US-09-130-287-10	US-08-614-935-10	US-09-839-542B-50
Sequence 228, App	Sequence 1, Appli	Sequence 228, App		Sequence 50, Appl	Sequence 70, Appl	Sequence 5, Appli	Sequence 16, Appl	Sequence 229, App	Sequence 228, App	•	•	Sequence 229, App	٣.	Sequence 67, Appl		Sequence 10, Appl	

ALIGNMENTS

TELEPHONE: (202) 408-400 TELEPAX: (202) 408-4400 INFORMATION FOR SEQ ID NO: : SEQUENCE CHARACTERISTICS: LENGTH: 8 amino acids CLASSIFICATION: 435 PRIOR APPLICATION DATA: APPLICATION NUMBER: US 08/ FILING DATE: 19-MAY-1995 CLASSIFICATION: 435 PRIOR APPLICATION DATA: APPLICATION NUMBER: US 08/ FILING DATE: 02-MAY-1995 CLASSIFICATION: 435 CLASSIFICATION: 435 GENERAL INFORMATION: NAME: Meyers, Kenneth J. REGISTRATION NUMBER: 25,146 REFERENCE, DOCKET NUMBER: 034 TELECOMMUNICATION INFORMATION: COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/467,822 FILING DATE: 06-JUN-1995 COUNTRY: USA ZIP: 20005-3315 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk APPLICANT: Labigne, Agnes APPLICANT: Sauerbaum, Sebastien APPLICANT: Ferrero, Richard L. APPLICANT: Thiberge, Jean-Michel TITLE OF INVENTION: IMMUNOGENIC COMPOSITIONS AGAINST TITLE OF INVENTION: HELICOBACTER INFECTION, POLYPEPTIDES FOR TITLE OF INVENTION: COMPOSITIONS, AND NUCLEIC ACID SEQUENCES TITLE OF INVENTION: POLYPEPTIDES ATTORNEY/AGENT INFORMATION: NUMBER OF SEQUENCES: 4 CORRESPONDENCE ADDRESS: STREET: 1300 I St CITY: Washington ADDRESSEE: Finnegan, Henderson, Farabow, Garrett ADDRESSEE: Dunner Application US/08467822 1300 I Street, N.W. : (202) 408-4000 (202) 408-4400 US 08/432,697 US 08/447,177 03495.0137-02000 USE IN THE

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                RESULT 3
US-08-466-248-11
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Best Local Similarity
"---hes 6; Conserv:
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                                                                                                                                                                                                     ; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-432-697-11
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Sequence 11, Application US/08466248
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tent No.
                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 8 amino acids
                                                                                                                                                                                                                                                                                                                                             NAME: Meyers, Kenneth J.
REGISTRATION NUMBER: 25,146
REGERENCE/DOCKET NUMBER: 03-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 408-4000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIF: 20005-3315

COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION: NAME: Meyers, Kenneth J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Dunner
ADDRESSEE: Dunner
1300 I Street, N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/0 FILING DATE: 02-MAY-1995 CLASSIFICATION: 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: linear
                                                                                                                                                                                                                                              TYPE: amino acid
STRANDEDNESS: sin
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Ferrero, Richard L.
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85.7%;
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85.7%;
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ER: 03495.0137-00000
                                                                                                                                                        Score 36; I
Pred. No. 2.
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Pred. No. 2.
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2.5e+05;
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2.5e+05;
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Query Match
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                                                                                                                       Sequence 4, Application US/08204487 Patent No. 5565425
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/447,177
FILING DATE: 19-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/432,697
FILING DATE: 02-MAY-1995
CLASSIFICATION: 435
CLASSIFICATION: 435
                                                                    GENERAL INFORMATION:
APPLICANT: YAMAMC
APPLICANT: NAKASH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: (202) 408-440 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: FALL.__
ADDRESSEE: Dunner
ADDRESSEE: Dunner
ADDRESSEE: 1300 I Street, N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 20005-3315
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: FROM PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
COPPRATING SYSTEM: PC-DOS/MS-DOS
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                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 8 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Meyers, Kenneth J.
REGISTRATION NUMBER: 25,146
REFERENCE/DOCKET NUMBER: 03:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 06 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE:
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DOSAKO, SHUN'ICHI
KAWASAKI, YOSHIHIRO
                                                                      NAKASHIMA, HIDEKI
                                  TANAKA, SHIGEAKI
                                                      MOSUCHI, WATARU
                                                                                          уамамото, наокі
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85.7%;
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Pred. No. 2.5e+05;
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Maximum
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Maximum Match 100%
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Perfect score:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scoring table:
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Match
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Gapop 10.0 , Gapext 0.5
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1: pir1:*
2: pir2:*
3: pir3:*
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                       GPKGRNVVLEKKWGAP 16
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   GenCore version 5.1.6 (c) 1993 - 2003 Compugen Ltd.
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A86126
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T-cell receptor be
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ES9501
25K kidney and gallbladder stone protein - unidentified bacterium (fragment)
C;Species: unidentified bacterium
C;Species: - unidentified bacterium
C;Date: 07-Feb-1997 #sequence_revision 07-Feb-1997 #text_change 10-Jul-1998
C;Accession: E58501
                                                                                                                                                                              G;Accession: E58501
R;Binette, J.P.; Binette, M.B.
submitted to the Protein Sequence Database, October 1996
A;Description: The proteins of kidney and gallbladder stones.
A;Reference number: A58501
A;Roccession: E58501
A;
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 RESULT 3
                                                                                                                                 A_iExperimental source: human kidney and gallbladder stones A_iNote: tentative identification of \theta-Gly and 13-Ser
                                                                                                                                                        A; Molecule type: protein A; Residues: 1-16 <BIN>
                                                                                  Matches
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Similarity 6; Conserv

Conservative

28.9%;

Score 26; DB 2; Le Pred. No. 7.7e+02; l; Mismatches 3;

Length 16; Indels

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Gaps

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KGGNVNLSKE 15 KGRNVVLEKK 12

Query Match 28.9%; Score 26; DB 2; Length 14 Best Local Similarity 50.0%; Pred. No. 6.7e+02; Matches 4; Conservative 3; Mismatches 1; Indels	C;ACCESSION: 154945 R;TaO, T; Bourne, J.C.; Blumenthal, R.M. J. Bacteriol. 173, 1367-1375, 1991 A;Title: A family of regulatory genes associated with type II restriction, A;Reference number: I54945; MUID:91139577; PMID:1995588 A;Accession: I54945 A;Accession: Freliminary; translated from GB/EMBL/DDBJ A;Residus: preliminary; translated from GB/EMBL/DDBJ A;Residus: 1-14 < RES> A;Cross-references: GB:M63619; NID:g147664; PIDN:AAA24555.1; PID:g147665	RESULT 1 154945 gene C protein - Escherichia coli (fragment) C;Species: Escherichia coli C;Date: 07-Jun-1996 #sequence_revision 07-Jun-1996 #text_change	30 20 22.2 15 2 D28587 31 20 22.2 16 1 MTDPSS 32 20 22.2 16 2 G45581 33 20 22.2 16 2 S36876 34 19 21.1 11 2 D56679 35 19 21.1 12 D56679 36 19 21.1 13 2 T08533 37 19 21.1 13 2 S22995 38 19 21.1 13 2 S22995 39 19 21.1 13 2 S239767 40 19 21.1 13 2 S57567 40 19 21.1 13 2 S57567 40 19 21.1 15 2 G83988 41 19 21.1 15 2 PA0102 42 19 21.1 15 2 PA0102 43 19 21.1 16 2 B28587 44 19 21.1 16 2 B28587
1 14; dels 0; Gaps 0;	II restriction-modification	change 08-Oct-1999	T-cell receptor be melanotropin beta orf 61.1 - phage T aquacobalamin redu Achatina cardio-ex collagen alpha 1(I hypothetical prote phypothetical prote polysialoglycoprot T cell receptor V-hypothetical prote oligo-1,6-glucosid fructose, bisphosph T-cell receptor be T-cell receptor be T-cell receptor be T-cell receptor be

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melanotropin alpha - horse
C;Species: Equus caballus (domestic horse)
C;Date: 31-Dec-1991 #sequence revision 31-Dec-1991 #text_change 20-Mar-1998
C;Accession: A91785; A01464
R;Dixon, J.S.; Li, C.H.
J. Am. Chem. Soc. 82, 4568-4572, 1960
A;Title: The isolation and structure of alpha-melanocyte-stimulating hormons
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     melanotropin alpha - Arabian camel
C;Species: Camelus dromedarius (Arabian camel)
C;Date: 13-U1-1981 #sequence_revision 13-Jul-1981 #text_change 20-Mar-1998
                                                                                                                                                                              Gene 129, 41-49, 1993
A;Title: Sequence analysis of the left end of the Bacillus subtilis bacteriophage SPP1
A;Reference number: JN0729; MUID:93328123; PMID:8335259
A;Accession: JN0730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;Superfamily: corticotropin-lipotropin
C;Keywords: blocked amino end; blocked carboxyl end; hormone; pituitary
F;11/Modified site: blocked amino end (Ser) (probably acetylated) #status experimental
F;13/Modified site: blocked carboxyl end (Val) (probably amidated) #status experimental
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A; Accession: A91785
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C;Keywords: acetylated amino end; blocked carboxyl end; hormone; pituitary
F;11/Modified site: acetylated amino end (Ser) (partial) #status experimental
F;13/Modified site: blocked carboxyl end (Val) (probably amidated) #status experimental
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A; Molecule type: protein
A; Residues: 1-13 < LIC>
C; Superfamily: corticotre
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R;Li, C.H.; Danho, W.O.; Chung, D.; Rao, A.J. Biochemistry 14, 947-952, 1975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C; Accession: A01464
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R;Chai, S.; Szepan, U.; Lueder, G.; Trautner, T.A.; Alonso,
                                                                                                                                                                                                                                                                                                         C;Species: phage SPP1
C;Date: 03-Feb-1994 #sequence_revision 03-Feb-1994 #text_change 17-Mar-1999
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A; Residues: 1-15 < CHA>
                                                                                                               A;Cross-references: EMBL:X65941
                                                                                                                                                                                                                                                                                                                                                            hypothetical 1.7K protein - phage SPP1
N;Alternate names: hypothetical protein 42.1
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Pred. No. 9.2e+02;
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C; Accession: A31570
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T-cell receptor beta chain (H2) - mouse (fragment)
C;Species: Mus musculus (house mouse)
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A34243
                                                                                                                                    R;Kohama, Y.; Matsumoto, S.; Oka, H.; Teramoto, T.; Okabe, M.; Mimura, T. Biochem. Biophys. Res. Commun. 155, 332-337, 1988
A;Title: Isolation of angiotensin-converting enzyme inhibitor from tuna muscle.
A;Reference number: A31570; MUID:88326322; PMID:3415688
                                                                                                                                                                                                                                                 angiotensin-converting enzyme inhibitor - yellowfin tuna
C;Species: Thunnus albacares (yellowfin tuna)
C;Date: 31-Mar-1990 #sequence_revision 31-Mar-1990 #text_change 18-Aug-2000
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A; Residues: 1-15 < CAS>
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A;Note: the source is designated as Neothunnus macropterus C;Superfamily: unassigned animal peptides C;Keywords: angiotensin-converting enzyme inhibitor
                                                                     A; Molecule type: protein A; Residues: 1-8 < KOH>
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C;Species: Mus musculus (house mouse)
C;Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 05-Nov-1999
C;Accession: PH0760
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A,Title: Structural studies of fertilization-associated carbohydrate-rich glycoproteins of a novel penta-antennary N-linkedglycan chain in the tandem repeating glycopeptide us A,Reference number: A34243; MUID:89380184; PMID:2777771
A,Accession: A34243
                                                                                                             A;Cross-references: EMBL:X60855; NID:g51194; PIDN:CAA43245.1; A;Experimental source: T lymphocyte C;Keywords: T-cell receptor
                                                                                                                                                                                                                                                                                               A,Title: T cell receptor genes in a series of class I major histocompatibility complex allelic exclusion and antigen-specific repertoire.
A,Reference number: PH0746; MUID:92078846; PMID:1836010
                                                                                                                                                                                                                                                                                                                                                                                            R;Casanova, J.L.; Romero, P.; Widmann, C.; Kourilsky, P.; Maryanski, J.L. J. Exp. Med. 174, 1371-1383, 1991
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;Species: Paralichthys olivaceus (Japanese flounder)
;Date: 07-8ep-1990 #sequence_revision 07-Sep-1990 #text_change 12-Feb-1999
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                         Score 23; DB 2;
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CAMDR CAMDR CAMDR STANDARD; PRT; 13 AA. PO1198; 21-JUL-1986 (Rel. 01, Created) 21-JUL-1986 (Rel. 01, Last sequence update) 16-OCT-2001 (Rel. 40, Last annotation update) Melanotropin alpha (Alpha-MSH). Camelus dromedarius (Dromedary) (Arabian camel), and Equus caballus (Horse). Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi Mammalia; Eutheria; Cetartiodactyla; Tylopoda; Camelidae; Camelu NCBI_TaxID=9838, 9796; [1] SECIES=C.dromedarius; MEDLINE=75146434; PubMed=1125179; Li C.H., Danho W.O., Chung D., Rao A.J.; "Isolation, characterization, and amino acid sequence of	one par table of the part of t	
STANDARD; PRT; 1. 01, Created) 1. 01, Last sequenc 1. 40, Last annotat pha (Alpha-MSH). rius (Dromedary) (A (Horse). zoa; Chordata; Cran ria; Cetartiodactyl , 9796; , 9796; , 9796; W.O., Chung D., Rao racterization, and	STANDARD; 1. 32, Created) 1. 32, Last seq 1. 40, Last ann pais (Alpha-MSH) nsis (Green ano zoa, Chordata; quamata; Iguani 7; y: pubMed=16676; Cha A., Rand-We, cha A., Rand-We en intermediate he intermediate 1.1266 (1991) BELONGS TO THE 1941; Mcortin_A ACTH_domain; 1. ion. 13 AA, 1608 MW; FI 27.8%; S; ity 60.0%; P; servative 1;	. 9 9 10 10 10 10 10 10 10 10
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13 AA. update) on update) abian camel) abian cyrtebr ; Tylopoda; ; Tylopoda;		YTS
il), and brata, E ; Cameli) chameleon). ebrata; Eure Polychrotina Polychrotina low L., Adam major form the reptile, the reptile, Length 13 02; 1; Indels	•
uteleost dae; Can	chameleon). chameleon). cebrata; Euteleostomi Polychrotinae; Anoli Polychrotinae; Anoli Polychrotinae; Anoli and L., Adamczyk D.L. amajor form of alpha the reptile, Anolis the reptile, Anolis column 13; Length 13; 1; Length 13; 1; Indels 0;	P82929 P83279 P24660 P18110 P181353 P16353 P16353 P10939 P10939 P119270 P13270 P19118 P83327
ostomi; Camelus	leostomi; e; Anolis e; Anolis zzyk D.L.; of alpha-M Anolis	bos taur macrobra stacrobra stagrell panagrell romalea carausiu heliothi nauphoet tatropha nicotian oncorhyn
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Biochem. Biophys. Res. C
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PIR; A31570; A31570.
PIR; A31570; BAA; 953 M
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01-NOV-1990 (Rel. 16, L
01-NOV-1990 (Rel. 16, L
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SEQUENCE
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o1-NOV-1990 (Rel. 16, Last annotation update)
Angiotensin-converting enzyme inhibitor.
Thunnus albacares (Yellowfin tuna) (Neothunnus macropterus).
Sukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Buteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Scombroi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              J. Am. Chem. Soc. 82:456
-!- SIMILARITY: BELONGS
PIR; A01464; MTCMAD.
PIR; A91785; MTHOAD.
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Dixon J.S., Li C.H.;
"The isolation and structure of alpha-melanocyte-stimulating
                                                                                                                      MORN_HUMAN
F01163;
                                                                                                                                                              HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE=88326322; PubMed=3415688;
Kohama Y., Matsumoto S., Oka H., Teramoto T.,
"Isolation of angiotensin-converting enzyme i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACI_THUAL
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Pfam; PF00976; ACTH_domain; 1.
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Biochemistry:
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21-JUL-1986
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Homo sapiens (Human)
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14:947-952(1975).
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                                   neuropeptide
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SLONGS TO THE POMC
  (Rat),
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Pred. No. 5.5e
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AMIDATION.
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LIGA TRAVE
P20011;
01-FEB-1991
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PIR; A93900; 1
PIR; B01427; 1
PIR; B93900; 1
PIR; C01427; 1
                                                                                 01-FEB-1991 (Rel. 17, Last sequence upc 28-FEB-2003 (Rel. 41, Last annotation upon Lightham A (EC 1.11.1.14) (Diarylpropa peroxidase) (Fragment).
Trametes versicolor (White-rot fugus).
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               Bukaryota; Fungi; Basidiomycota;
Aphyllophorales; Trametes.
NCBI_TaxID=5325;
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MEDLINE=90059923; PubMed=2583101;
MEDLINE=90059923; PubMed=2583101;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE=82050803;
Birr C., Zachmann
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Bodenmuller H., Schaller H.C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SPECIES=Human,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAUTION: THIS PEPTIDE WAS PIRST ISOLATED FROM NERVE AND WAS CALLED HEAD ACTIVATOR BY THE AUTHORS, BECAUS HEAD-SPECIFIC GROWTH AND DIPPERENTIATION IN THIS ANI BEEN FOUND IN MAMMALIAN INTESTINE AND HYPOTHALAMUS.
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Pred. No.
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Result
No.
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Maximum Match 100%
Listing first 45 summaries
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Perfect score:
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    111111
6543210
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1: sp_archea:*
2: sp_bacteria
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147.459 Million cell updates/sec
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Gapop 10.0 ,
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90
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sp_bacteria:*
sp_fungi:*
sp_human:*
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sp_rodent:*
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                                       GenCore version 5.1.6 (c) 1993 - 2003 Compugen Ltd
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O70580
Q9UNF2
Q9R4P5
Q83410
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Q9UC18
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P82322 pisum sativ
Opw5q6 drosophila
Op4px5 felis silve
Op4vb2 varanus sal
Op4px7 felis silve
Op4px6 felis libyc
                                                          Q9uci8 homo sapien
Q9t2v8 homo sapien
Q9s8d6 triticum ae
Q9r5i7 escherichia
                                                                                                 Q9unf2 homo sapien
Q9r4p5 brevundimon
Q83410 mouse mamma
Q85645 mouse mamma
                                                                                                                                                 Q47599 escherichia
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Q8qdy6 human immun	Q8qe43 human immun	Q8qe45 human immun	Q8qe41 human immun	Q8qdy4 human immun	. Q8ge47 human immun	Q8qdy5 human immun	Q9h4x3 homo sapien		∞	Q9euz3 escherichia	Q63389 rattus norv	œ	ω.	-	Q9tws8 lamellibrac	P92076 euhadra her	000604 homo sapien	Q9bxx4 homo sapien	ū		Q9mqk6 rupicapra r			Q31006 bos taurus	5 varanus	varanus	Q94vb5 varanus sal	Q94va7 varanus sal

ALIGNMENTS

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RESULT 2
070580
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Q47599
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Best Local S
Matches 4
070580;
01-AUG-1998
01-AUG-1998
                          070580
                                                                                                                                                  Q47599 PRELIMINARY; PRT; 14 AA. Q47599; O1-NOV-1996 (TrEMBLrel. 01, Created) O1-NOV-1996 (TrEMBLrel. 01, Last sequence update) O1-NOV-1998 (TrEMBLrel. 08, Last annotation update)
                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                           Enterobacteriaceae; Escherichia.
                                                                                                                                                                                                                                                   Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
                                                                                                                                                                                                                                                             Escherichia coli.
                                                                                                                                                                                                                                                                             C (Fragment)
                                                                                                                                                                                                                                NCBI_TaxID=562;
                                                                    5 RNVVLEKK 12
: |::|||
2 KBVIMEKK 9
                                                                                                       l Similarity
4; Conserva
                                                                                                                                          14 AA; 1705 MW;
(TrEMBLrel. 07, Created)
(TrEMBLrel. 07, Last sequence update)
                                                                                                         Conservative
                          PRELIMINARY;
                                                                                                                28.9%;
                                                                                                       Score 26; DB 2; Le
Pred. No. 1.5e+03;
3; Mismatches 1;
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Q9R4P5
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Q9R4P5;
01-MAY-2000 (
01-MAY-2000 (
01-JUN-2000 (
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Q9UNF2;
01-MAY-2000
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NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE=Breast;
TISSUE=Breast;
Ratcliffe T.A., Vitz J.R., Ray D.B.;
Ratcliffe T.A., Vitz J.R., Ray D.B.;
"SNP located within intron 32 of human pro-alpha 1 (I) collagen at 10,828 bp: cytosine replaces adenine.";
at 10,828 bp: cytosine replaces adenine.";
submitted (FEB-1999) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Sequence comparisons and functional studies of the carbonic anhydrase 3 (CA3) gene."; Gene 214:157-165(1999).
29R495;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
Ribosomal protein L24 (Fragment).
Brevundimonas diminuta (Pseudomonas diminuta).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAR3 OR CARS OR CA3.

Mus musculus (Mouse).

Eukaryota; Metazoa; Chordata;

Mammalia; Eutheria; Rodentia;
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Mammalia; Eutheria;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=9606;
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MGI:88270; Car3.
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                                                                                                                                                                                                                                                                                                                                                                               Conservative
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(TrEMBLrel. 13, Last sequence up)
(TrEMBLrel. 13, Last annotation)
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953 MW;
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100.0%; Pr
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chordata;
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Pred. No.
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Pred. No. 1.5e+03;
2; Mismatches 3
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2.2e+03;
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RESULT 5
Q8341
Q8341
DT 01-N
DT 01-N
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OS WCBBI
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01-NOV-1996
01-JUN-2002
Wheeler D.A., Butel J.S., Medina D., Cardiff R.D., Hager G.I "Transcription of mouse mammary tumor virus: Identification candidate mRNA for the long terminal repeat gene product.";
                                                                   SEQUENCE FROM N.A. MEDLINE=83139005; PubMed=6298469;
                                                                                                                                                            Mouse mammary tumor virus Viruses; Retroid viruses;
                                                                                                                                                                                                                                               01-NOV-1996 (TrEMBLrel. 01, 01-NOV-1996 (TrEMBLrel. 01, 01-JUN-2002 (TrEMBLrel. 21,
                                                                                                                                                                                                                                                                                                                                        Q85645
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InterPro; IPR001213; MMTV SAG;
Pfam; PF01054; MMTV SAG; 1.
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STRAIN=Mtv-6;
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Int. J. Syst. Bacteriol. 45:266-273(1995).
SEQUENCE 15 AA; 1513 MW; 8BA258CFA725914F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=95244309; PubMed=7727274; Ochi K.;
                                                                                                                              NCBI_TaxID=11757;
                                                                                                                                                                                                                                                                                                                 Q85645;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Viruses; Retroid viruses;
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                                                                                                                                                                                                                           Endogenous mouse
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mammary tumor virus proviral LTR
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                                                                                                             Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being priand is derived by analysis of the total score distribution.
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2. /SIDS1/gogdata/geneseq/geneseqp-emb1/AA1981.DAT:*

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Regult		Query Match Length DB	Length	BB	ID	Description
ב	90	100.0	16	21	AAY93329	Amino acid sequenc
2	90	100.0	16	23	AAU99964	Mycobacterium tube
ω	83	92.2	15	17	AAR94779	Peptide from libra
4	83	92.2	15	18	AAW43457	Mycobacteria sp. h
₅	61	67.8	16	17	AAR94780	Peptide from libra
σ	61	67.8	16	18	AAW43458	Mycobacteria sp. h
7	57	63.3	16	17	AAR94778	Peptide from libra
80	57	63.3	16	18	AAW43456	Mycobacteria sp. h
9	55	61.1	16	21	AAY93330	Amino acid sequenc

Peptide having a defined sequence is used in vaccines for conferring immunity against autoimmune disease or inflammatory disorders, especially arthritis -

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	AAW38002	AAU02332	AAW56753	AAG94842	ABG61615	AAW75543	ABG66058	AAM00717	AAM97155	ABB97729	ABB97728	AAW19794	AAR86962	AAB45892	ABJ04516	ABP82686	AAW37382	AAW25443	AAW24451	AAW38766	AAB32456	AAM48084	AAB90858	ABG71559	AAG64099	AAM50288	AAU85712	AAB35931	AAB01586	AAB10751	AAW43459	AAR94781	AAB88279	AAB88269	AAB88272	AAU99965
	www domain binding	A binding TA	A. tumefaciens ant	Human complementar	Human DPRP-3 pepti	agen II	cepsilo	fra	Human peptide #430	Human procathepsin	Human procathepsin	ing pepti	Nuclear localisati	Human tumor-associ	Molt-4 leukaemia c	G protein-coupled	Hepatitis C virus	Grb2 N-terminal SH	Nucleic acid (NA)	Delivery peptide u	Human secreted pro	Tie-1 binding surr	Melanocyte stimula	G. multiflorum rec	Cytochrome b12 N-t	Neural cell adhesi	Extra cellular mat	NCAM/heparin bindi	Proteoglycan bindi	Fibrin gel binding	Mycobacteria sp. h	ide from	65 peptid	p-65	Hsp-65 peptide epi	Mycobacterium tube

ALIGNMENTS

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RESULT 1
AAY93329
WPI; 2000-376486/32.
                                                                                                                                                         Mycobacterium tuberculosis
                                                                                                                                                                                                                      04-SEP-2000 (first entry)
                                                                                                                                                                                                                                                         AAY93329 standard; peptide; 16
                                                  Naparstek Y, Ulmansky R,
                                                                                    05-NOV-1998;
                                                                                                      04-NOV-1999;
                                                                                                                       18-MAY-2000.
                                                                                                                                        WO200027870-A1
                                                                                                                                                                         Epitope; heat shock protein 60; Hsp60; vaccine; autoimmune disease; inflammatory disorder; arthritis
                                                                                                                                                                                                    Amino acid sequence of an epitope of heat shock protein
                                                                                                                                                                                                                                        AAY93329;
                                                                   (HADA-) HADASIT MEDICAL RES SERVICES & DEV.
                                                                                    98US-0107213.
                                                                                                      99WO-IL00595.
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                                                                                  The invention relates to backbone cyclised peptide analogues or antagonists of heat shock protein (hsp). The analogues and antagonists are useful in the treatment of chronic inflammatory disease, autoimmune disease, infectious disease and graft rejection, and for diagnosing autoimmune and inflammatory disease including juvenile rheumatoid arthritis, type I diabetes, multiple sclerosis, systemic lupus erythematosus, inflammatory bowel disease, uveitis, thyroiditis and arteriosclerosis. This sequence represents a backbone cyclised peptide analogue of a heat shock protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60 (Hsp60) of Mycobacterium tuberculosis. The peptide, and the nucleic acid encoding it, are useful in vaccines for conferring immunity against autoimmune disease or inflammatory disorders, especially arthritis. The peptide may also be used to raise antibodies, which are then used for passive immunisation.
                                                                                                                                                                                                                                  Claim 5; Page 42; 50pp; English.
                                                                                                                                                                                                                                                             New backbone cyclized the treatment of e.g.
                                                                                                                                                                                                                                                                                                                                      Elias D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        arteriosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Heat shock protein; hsp; hsp60; chronic inflammatory disease; autoimmune disease; infectious disease; graft rejection; type I diabetes; juvenile rheumatoid arthritis; multiple sclerosis; uveitis; cyclic; systemic lupus erythematosus; inflammatory bowel disease; thyroiditis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          07-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The
                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                          11-DEC-2001; 2001WO-IL01144.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200248312-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mycobacterium tuberculosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mycobacterium tuberculosis hsp60 backbone cyclised peptide analogue #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAU99964;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAU99964 standard; Peptide; 16 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim
                                                                                                                                                                                                                                                                                                                                                                                               11-DEC-2000; 2000IL-0140233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       present sequence represents an epitope of the heat shock protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2; Page 7; 58pp; English
 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              l Similarity
16; Conserv
                                                                                                                                                                                                                                                                                                                                                                   PEPTOR LTD
              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GPKGRNVVLEKKWGAP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GPKGRNVVLEKKWGAP 16
                                                                                                                                                                                                                                                                                                                                     Avron A,
                                                          16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16 AA;
 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                        8
              100.0%;
                                                                                                                                                                                                                                                                                                                                     Senderowitz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%;
                                                                                                                                                                                                                                                             peptide analog of heat shock protein useful autoimmune disease -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16
 0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 90;
Pred. No.
             Score 90; DB 23;
Pred. No. 1.1e-08;
 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                . 1.1e-08;
thes 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21;
  0
                            Length 16;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
 0
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  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
 0
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RESULT 4
AAW43457
ID AAW4
XX
AC AAW4
XX
DT 08-A
XX
DE Myco
XX

AAW43457;

AAW43457 standard; peptide; 15

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08-APR-1998

(first entry)

Mycobacteria sp.

hsp68 derived peptide

(group 1

#7)

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RESULT 3
AAR94779
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                                                            Query Match
Best Local Similarity
                                                 Matches
                                                                                                                      AAR94773-R94878 are overlapping peptides of a library spanning the whole of microbial hsp65 (heat shock protein 65). Bleven antigens were prepared from the library and used to immunise mice, after 10 days the mice received injections of pristane to induce arthritis and the animals examined for incidence of arthritis. A preferred anti-arthritic peptide was found to correspond to residues 21-31 of full length hsp65 (see AAR94772). Peptides conty, this sequence are used in the diagnosis, treatment and prophylaxis (may be used in a vaccine) of autoimmune diseases such as rheumatoid arthritis.
                                                                                                                                                                                                                                                                           Polypeptide derived from bacterial heat shock protein 65 - for in diagnosis, prophylaxis and treatment of auto-immune disease rheumatoid arthritis.
                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                       Elson CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-APR-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Peptide from library spanning whole of hsp65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-NOV-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR94779;
                                                                                                                                                                                                                                                  Example 1; Figure 1; 88pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                       27-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9610039-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hsp; heat shock protein; Mycobacterium bovis; microbial; diagnosis; rheumatoid arthritis; autoimmune disease; treatment; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR94779
                                                                                                                                                                                                                                                                                                                                                                                                                                27-SEP-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  prophylaxis.
                                                                                                                                                                                                                                                                                                                                                                               (PEPT-) PEPTIDE THERAPEUTICS LTD.
                                                 15;
                       μ
                        GPKGRNVVLEKKWGA 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GPKGRNVVLEKKWGAP
GPKGRNVVLEKKWGA 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GPKGRNVVLEKKWGAP
                                                                                                                                                                                                                                                                                                                                                       Thompson
                                                                                                   5
                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first
                                                                                                   $
                                                                                                                                                                                                                                                                                                                                                                                                       94GB-0019553.
                                                                                                                                                                                                                                                                                                                                                                                                                                 95WO-GB02295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           peptide; 15
                                                            92.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16
                                                 ; Score 83; DB
%; Pred. No. 1.8
0; Mismatches
                                                              DB 17; I
1.8e-07;
                                                    0
                                                                          Length 15;
                                                    Indels
                                                    0,
                                                                                                                                                                                                                                                                                            e.g.
                                                    Gaps
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RESULT 5
AAR94780
ID AAR9
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                                                                                                                                                                                                                                                                                                                                                                                               Matches
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This peptide is one of a library (see AAW43451-W43556) which represents the mycobacterial heat shock protein, hsp55 and is designed to study a novel method for the treatment of autoimmune disease e.g. rheumatoid arthritis. This fragment has been allocated as a group 1 peptide which is composed of the fragments found in AAW43451 to AAW43460. Mycobacterial hsp65 is known to be an immunodominant antigen in a number of infectious diseases and is linked to pristane induced arthritis (PIA) in vitro, however heat shock proteins and peptides derived from microbial sources may act as self antigens and thus have limited clinical use. The human hsp65 homologue, hsp58, or fragments of the hsp58 protein (see AAW14948-W14950) may be useful in the development of vaccines for prophylaxis or treatment of an autoimmune disease such as rheumatoid
                                                                                                                        rheumatoid arthritis; autoimmune disease; treatment; vaccine prophylaxis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Heat shock protein; hsp58; autoimmune disease; hsp65; vaccine; rheumatoid arthritis; antigen; infectious disease; prophylactic; pristane induced arthritis; PIA.
                                                                                             Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Fig 1a; 91pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Polypeptide(s) derived from microbial heat shock protein - useful for treatment of autoimmune disease esp. arthritis
             27-SEP-1995;
                                       04-APR-1996.
                                                                                                                                                  Hsp; heat shock protein; Mycobacterium bovis; microbial; diagnosis;
                                                                                                                                                                              Peptide from library spanning whole of hsp65.
                                                                                                                                                                                                            11-NOV-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Elson CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27-SEP-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-SEP-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     03-APR-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic
                                                                  WO9610039-A1
                                                                                                                                                                                                                                                               AAR94780 standard; peptide; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9711966-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mycobacteria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (PEPT-) PEPTIDE THERAPEUTIC LTD
                                                                                                                                                                                                                                                                                                                                                                                             l Similarity
15; Conserv
                                                                                                                                                                                                                                                                                                                                                                 1 GPKGRNVVLEKKWGA 15
                                                                                                                                                                                                                                                                                                                                       GPKGRNVVLEKKWGA 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Thompson JS
                                                                                                                                                                                                                                                                                                                                                                                                                                                      15 AA;
                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gp.
                                                                                                                                                                                                          (first entry)
             95WO-GB02295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           95GB-0019737
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                                                                                                                                                                                                                                                                                                                                                                                         92.2%; oc.
100.0%; Pr
                                                                                                                                                                                                                                                                                                                                                                                                          Score 83;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                           DB 18;
                                                                                                                                                                                                                                                                                                                                                                                                            1.8e-07;
                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                        Length 15;
                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mycobacterial
                                                                                                                                                                                                                                                                                                                                                                                             0,
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RESULT 6
AAW43458
ID AAW4
XX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR94773-R94878 are overlapping peptides of a library spanning the whole of microbial hap65 (heat shock protein 65). Eleven antigens were prepared from the library and used to immunise mice, after 10 days the mice received injections of pristane to induce arthritis and the animals examined for incidence of arthritis. A preferred anti-arthritic peptide was found to correspond to residues 21-31 of full length hsp65 (see AAR94772). Peptides contg. this sequence are used in the diagnosis, treatment and prophylaxis (may be used in a vaccine) of autoimmune
                                                             Polypeptide(s) derived from microbial heat shock protein for treatment of autoimmune disease esp. arthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Polypeptide derived from bacterial heat shock protein 65 - for in diagnosis, prophylaxis and treatment of auto-immune disease rheumatoid arthritis.
This peptide is one of a library (see AAW43451-W43556) which represents the mycobacterial heat shock protein, hsp65 and is designed to study
                                       Disclosure; Fig la; 91pp; English
                                                                                                        WPI; 1997-212851/19.
                                                                                                                                                                                       27-SEP-1995;
                                                                                                                                                                                                                                           03-APR-1997
                                                                                                                                                                                                                                                                     WO9711966-A1
                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                       Heat shock protein; hsp58; autoimmune disease; hsp65; vaccine; rheumatoid arthritis; antigen; infectious disease; prophylactic; pristane induced arthritis; PIA.
                                                                                                                                                                                                                                                                                                                                                                                            Mycobacteria
                                                                                                                                                                                                                                                                                                                                                                                                                       08-APR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAW43458;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAW43458 standard; peptide; 16 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 1; Figure 1; 88pp; English
                                                                                                                                                                                                                26-SEP-1996;
                                                                                                                                                                                                                                                                                              Mycobacteria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27-SEP-1994;
                                                                                                                                                              (PEPT-) PEPTIDE THERAPEUTIC LTD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6 NVVLEKKWGAP 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                such as rheumatoid arthritis.
                                                                                                                                  Thompson JS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Thompson SJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                              ds
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                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
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                                                                                                                                                                                       95GB-0019737
                                                                                                                                                                                                                 96WO-GB02382
                                                                                                                                                                                                                                                                                                                                                                                           hsp68 derived peptide (group 1 #8).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              67.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                b; Score 61; DB
b; Pred. No. 0.0
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 17;
0.0013;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                               - useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        for use sease e.g.
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RESULT 7
AAR94778
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 11
Query Match
Best Local Similarity
                                                                        AAR94773-R94878 are overlapping peptides of a library spanning the whole of microbial hsp65 (heat shock protein 65). Bleven antigens were prepared from the library and used to immunise mice, after 10 days the mice received injections of pristane to induce arthritis and the animals examined for incidence of arthritis. A preferred anti-arthritic peptide was found to correspond to residues 21-31 of full length hsp65 (see AAR94772). Peptides contg. this sequence are used in the diagnosis, treatment and prophylaxis (may be used in a vaccine) of autoimmune diseases such as rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a novel method for the treatment of autoimmune disease e.g. rheumatoid arthritis. This fragment has been allocated as a group 1 peptide which is composed of the fragments found in AAW43451 to AAW43460. Mycobacteria hsp65 is known to be an immunodominant antigen in a number of infectious diseases and is linked to pristane induced arthritis (PIA) in vitro, however heat shock proteins and peptides derived from microbial sources may act as self antigens and thus have limited clinical use. The human hsp65 homologue, hsp58, or fragments of the hsp58 protein (see AAW14948-W14950) may be useful in the development of vaccines for prophylaxis or treatment of an autoimmune disease such as rheumatoid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         rheumatoid arthritis; autoimmune disease; treatment; vaccine; prophylaxis.
                                             Sequence
                                                                                                                                                                                                                                            Example 1; Figure 1; 88pp; English.
                                                                                                                                                                                                                                                                                             Polypeptide derived from bacterial heat shock protein 65 - for use in diagnosis, prophylaxis and treatment of auto-immune disease e\cdot g
                                                                                                                                                                                                                                                                                                                                                                              Elson CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-APR-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-NOV-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR94778;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                             in diagnosis, prophylaxis and rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                               WPI; 1996-200888/20.
                                                                                                                                                                                                                                                                                                                                                                                                                                               27-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-SEP-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hsp; heat shock protein; Mycobacterium bovis; microbial; diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Peptide from library spanning whole of hsp65.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAR94778 standard; peptide; 16 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO9610039-A1
                                                                                                                                                                                                                                                                                                                                                                                                               (PEPT-) PEPTIDE THERAPEUTICS LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 100 nes 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6 NVVLEKKWGAP 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NVVLEKKWGAP 11
                                                                                                                                                                                                                                                                                                                                                                              Thompson
                                               16 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                               94GB-0019553.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95WO-GB02295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        67.8%;
63.3%;
100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
Score 57; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 61; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
DB 17;
0.0062;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 18;
0.0013;
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               Length 16;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        infectious
                                                                                                                                                                                                                                                                                              e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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                                                           Matches
                                                                         Query Match
Best Local (
                                                                                                                                                              This peptide is one of a library (see AAW43451-W43556) which represents the mycobacterial heat shock protein, hsp65 and is designed to study a novel method for the treatment of autoimmune disease e.g. rheumatoid arthritis. This fragment has been allocated as a group 1 peptide which is composed of the fragments found in AAW43451 to AAW43460. Mycobacterial hsp65 is known to be an immunodominant antigen in a number of infectious diseases and is linked to pristane induced arthritis (PIA) in vitro, however heat shock proteins and peptides derived from microbial sources may act as self antigens and thus have limited clinical use. The human hsp65 homologue, hsp58, or fragments of the hsp58 protein (see AAW44948-W14950) may be useful in the development of vaccines for prophylaxis or treatment of an autoimmune disease such as rheumatoid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Heat shock protein; hsp58; autoimmune disease; hsp65; vaccine; rheumatoid arthritis; antigen; infectious disease; prophylactic; pristane induced arthritis; PIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAW43456;
                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Fig la; 91pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                 Polypeptide(s) derived from microbial heat shock protein - useful for treatment of autoimmune disease esp. arthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1997-212851/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Elson CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-SEP-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26-SEP-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  03-APR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO9711966-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mycobacteria sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mycobacteria sp. hsp68 derived peptide (group 1 #6).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-APR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAW43456 standard; peptide; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (PEPT-) PEPTIDE THERAPEUTIC LTD.
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 σ
                               1 GPKGRNVVLEK 11
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                                                                         Similarity
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GPKGRNVVLEK 16
                                                                                                                        16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Thompson JS
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                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        95GB-0019737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    96WO-GB02382.
                                                                           100.0%;
                                                                           Score 57; pred. No.
                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>.</u>.
                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                              DB 18;
. 0.0062;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ٥,
                                                                                          Length 16;
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                                                                Indels
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                                                                Gaps
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RESULT 9
AAY93330
ID AAYS

AAY93330 standard; peptide; 16 AA

0

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RESULT 10
AAU99965
ID AAU99
  В
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                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
Matches 10
11-DEC-2000; 2000IL-0140233.
                                                                                                                                                                   Heat shock protein; hsp; hsp60; chronic inflammatory disease; autoimmune disease; infectious disease; graft rejection; type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present sequence represents an epitope of the heat shock protein 60 (Hsp60) of Mycobacterium tuberculosis. The peptide, and the nucleic acid encoding it, are useful in vaccines for conferring immunity against autoimmune disease or inflammatory disorders,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Peptide having a defined sequence is used in vaccines for conferring immunity against autoimmune disease or inflammatory disorders, especially arthritis -
                         11-DEC-2001;
                                                      20-JUN-2002
                                                                                                     Mycobacterium tuberculosis.
                                                                                                                                        autoimmune disease; infectious disease; graft rejection; type I diabetes; juvenile rheumatoid arthritis; multiple sclerosis; uveitis; cyclic; systemic lupus erythematosus; inflammatory bowel disease; thyroiditis.
                                                                                                                                                                                                       Mycobacterium tuberculosis hsp60 backbone cyclised peptide analogue #2.
                                                                                                                                                                                                                                     07-OCT-2002
                                                                                                                                                                                                                                                                                      AAU99965 standard; Peptide; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   especially arthritis. The peptide may also be used to raise antibodies, which are then used for passive immunisation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 3; Page 7; 58pp; English.
                                                                            WO200248312-A2
                                                                                                                                arteriosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2000-376486/32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Naparstek Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-NOV-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-MAY-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200027870-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Epitope; heat shock protein 60; Hsp60; vaccine; autoimmune disease; inflammatory disorder; arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (HADA-) HADASIT MEDICAL RES SERVICES & DEV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mycobacterium tuberculosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Amino acid sequence of an epitope of heat shock protein
                                                                                                                                                                                                                                                                                                                                                                                                        10;
                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                             VVLEKKWGAP 16
                                                                                                                                                                                                                                                                                                                                                        VVLEKKWGAP
                                                                                                                                                                                                                                                                                                                                                                                                                                                            16 AA;
                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                           2001WO-IL01144.
                                                                                                                                                                                                                                    (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                     Score 55; Pred. No.
                                                                                                                                                                                                                                                                                       A
                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                     DB 21;
0.014;
                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 16;
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RESULT 11
AAB88272
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Best Local
                                           Novel polypeptides containing epitopes derived shock protein 65 useful for treating bacterial infections, such as tuberculosis -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       disease, infectious disease and graft rejection, and for diagnosing autolumnune and inflammatory disease including juvenile rheumatoid arthritis, type I diabetes, multiple sclerosis, systemic lupus erythematosus, inflammatory bowel disease, uveitis, thyroiditis and arteriosclerosis. This sequence represents a backbone cyclised pepti
                                                                                                                                                                                                                                                  08-MAR-2001.
                                                                                                                                                                                                                                                                                                                                                                                              17-MAY-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                     AAB88272;
                                                                                            WPI; 2001-244396/25
                                                                                                                 Kiessling R,
                                                                                                                                                  (KIES/) KIESSLING R.
(CHAR/) CHARO J M.
(OTEN/) OTENHOFF T H M.
                                                                                                                                                                                                   30-AUG-1999;
                                                                                                                                                                                                                                                                          WO200116174-A2.
                                                                                                                                                                                                                                                                                                  Mycobacterium sp
                                                                                                                                                                                                                                                                                                                         tuberculosis.
                                                                                                                                                                                                                                                                                                                                              Heat shock protein-65; hsp-65;
                                                                                                                                                                                                                                                                                                                                                                      Hsp-65 peptide epitope #46
                                                                                                                                                                                                                                                                                                                                                                                                                                             AAB88272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             analogue of a heat shock protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to backbone cyclised peptide analogues antagonists of heat shock protein (hsp). The analogues and ar are useful in the treatment of chronic inflammatory disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 5; Page 42; 50pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2002-557613/59.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Elias D,
                                                                                                                                                                                                                         30-AUG-2000; 2000WO-IB01326.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         the treatment
                                                                                                                                                                                                                                                                                                                                   mmune response
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (PEPT-) PEPTOR LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      backbone cyclized peptide analog of heat shock protein useful treatment of e.g. autoimmune disease \, -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 VVLEKKWGAP 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7 VVLEKKWGAP 16
                                                                                                                                          GELUK A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                             standard; Peptide; 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                  Charo JM,
                                                                                                                                                                                                   99US-0151396.
                                                                                                                                                                                                                                                                                                                                    inducer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This sequence represents a backbone cyclised peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61.1%;
                                                                                                                  Otenhoff THM,
                                                                                                                                                                                                                                                                                                                                   sp-65; epitope;
vaccine; gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 55;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                              A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                  itope; antibacterial; tuberculostatic;
gene therapy; bacterial infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 23;
0.014;
                                                                                                                  Geluk A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                      and parasitic
                                                                     from Mycobacterial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
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The present Disclosure;

Page 55;

117pp; English.

sequence is a peptide epitope

derived from Mycobacterial heat

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RESULT 12
AAB88269
ID AAB88
XX AAB88269
XX AAB88
XX AAB88
XX Heat
XX Heat
XX Heat
XX Heat
XX WO2
XX WO2
XX WO2
PN WO2
XX AAB88
XX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            shock protein 65. This peptide epitope is useful for inducing a cytotoxic T-cell (CTL) response in vitro for an infectious microbe e.g. Mycobacteria e.g. Mycobacteriun tuberculosis; Rickettsia; Chlamydia; Trypanosoma; Helicobacter; Leishmania; Trichomonas e.g. T.vaginalis; Synechoccus e.g. S.vulcanis; Cowdria e.g. C.ruminatium; M.leprae; M.paratuberculosis; Brucella abortus; Leptospira interrogans; Legionella pneumophila; Coxiella burnetii; Staphylococcus aureus; Salmonella typhi; Yersinia enterocolitica; Neisseria meningitidis; N.gonorrhoeae; Haemophilus influenzae and Pseudomonas aeruginosa. This peptide epitope
                                                                                                                                                        The present sequence is a peptide epitope derived from Mycobacterial heat shock protein 65. This peptide epitope is useful for inducing a cytotoxic T-cell (CTL) response in vitro for an infectious microbe e.g. Mycobacterium tuberculosis; Rickettsis; Chlamydia; Trypanosoma; Helicobacter; Leishmania; Trichomonas e.g. T.vaginalis; Synechoccus e.g. S.vulcanis; Cowdria e.g. C.ruminatium; M.leprae; M.paratuberculosis; Brucella abortus; Leptospira interrogans; Legionella M.paratuberculosis; Brucella abortus; Leptospira interrogans; Legionella
pneumophila; Coxiella burnetii; Staphylococcus aureus; Salmonella typhi; Yersinia enterocolitica; Neisseria meningitidis; N.gonorrhoeae; Haemophilus influenzae and Pseudomonas aeruginosa. This peptide epitope is useful for treating bacterial and parasitic infections such as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel polypeptides containing epitopes derived shock protein 65 useful for treating bacterial infections, such as tuberculosis -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Heat shock protein-65; hsp-65; epitope; antibacterial; tuberculostatic; immune response inducer; vaccine; gene therapy; bacterial infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                08-MAR-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mycobacterium sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tuberculosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hsp-65 peptide epitope #43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-MAY-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 55; 117pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kiessling R, Charo JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-AUG-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (KIES/) KIESSLING R.
(CHAR/) CHARO J M.
(OTEN/) OTENHOPP T H M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GELU/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GELUK A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GPKGRNVVL 9
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100.0%; Pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Otenhoff THM,
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      from Mycobacterial heat and parasitic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 11;
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Matches 7
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Best Local &
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(CHAR/) CHARO J M.
(OTEN/) OTENHOFF T H M.
(GELU/) GELUK A.
                                                                                                                                                                                                                                                                                                                                                                                   The present sequence is a peptide epitope derived from Mycobacterial heat shock protein 65. This peptide epitope is useful for inducing a cytotoxic T-cell (CTL) response in vitro for an infectious microbe e.g. Mycobacterium tuberculosis; Rickettsia; Chlamydia; Trypanosoma; Helicobacter; Leishmania; Trichomonas e.g. T.veginalis; Synechoccus e.g. S.vulcanis; Cowdria e.g. C.ruminatium; M.leprae; Synetherculosis; Brucella abortus; Leptosepira interrogans; Legionella M.paratuberculosis; Brucella abortus; Leptoccus aureus; Salmonella typhi; Victoria aureus; Coxiella burnetii; Staphylococcus aureus; Salmonella typhi; Victoria aureus; Coxiella burnetii; Staphylococcus aureus; Salmonella typhi; Victoria aureus; Victoria au
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel polypeptides containing epitopes derived from Mycobacterial heat shock protein 65 useful for treating bacterial and parasitic infections, such as tuberculosis -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
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                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                  Yersinia enterocolitica; Neisseria meningitidis; N.gonorrhoeae;
Haemophilus influenzae and Pseudomonas aeruginosa. This peptide epitope
is useful for treating bacterial and parasitic infections such as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-244396/25.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kiessling R, Charo JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-AUG-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hsp-65 peptide epitope #53
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                                                                                                                                                                                                                                      tuberculosis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200116174-A2
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Similarity 100 7; Conservative
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                                                                                                                                                             9 AA;
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                                                Score 39;
Pred. No.
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Pred. No.
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9.3e+05;
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                                                                                    Length 9;
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Heat shock protein; hsp58; autoimmune disease; hsp65; vaccine; rheumatoid arthritis; antigen; infectious disease; prophylactic; pristane induced arthritis; PIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Polypeptide derived from bacterial heat shock protein 65 - for use in diagnosis, prophylaxis and treatment of auto-immune disease e.g. rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                             Mycobacteria sp. hsp68 derived peptide (group 1 #9).
                                                                                                                                                                             08-APR-1998
                                                                                                                                                                                                                                      AAW43459;
                                                                                                                                                                                                                                                                                          AAW43459 standard; peptide; 15 AA
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ive 0; Mismatches
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                                                                                                                                                                                                                                         This peptide is one of a library (see AAW43451-W43556) which represents the mycobacterial heat shock protein, hsp65 and is designed to study a novel method for the treatment of autoimmune disease e.g. rheumatoid arthritis. This fragment has been allocated as a group 1 peptide which is composed of the fragments found in AAW43451 to AAW43460. Mycobacterial hsp65 is known to be an immunodominant antigen in a number of infectious diseases and is linked to pristane induced arthritis (PIA) in vitro, however heat shock proteins and peptides derived from microbial sources may act as self antigens and thus have limited clinical use. The human hsp65 homologue, hsp58, or fragments of the hsp58 protein (see AAW14948-W14950) may be useful in the development of vaccines for
                                                                                                                                                                Sequence
                                                                                                                                                                                                                            prophylaxis or treatment of an autoimmune disease such as rheumatoid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Fig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Polypeptide(s) derived from microbial heat shock protein - useful for treatment of autoimmune disease esp. arthritis
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Published Applications AA:*

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2: /cgm2 6/ptodata/2/pubpaa/PCT_NEW PUB.pep:*

3: /cgm2 6/ptodata/2/pubpaa/US06_NEW PUB.pep:*

4: /cgm2 6/ptodata/2/pubpaa/US07_NEW PUB.pep:*

5: /cgm2 6/ptodata/2/pubpaa/US07_NEW PUB.pep:*

6: /cgm2 6/ptodata/2/pubpaa/US08_NEW PUB.pep:*

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11: /cgm2 6/ptodata/2/pubpaa/US09E_PUBCOMB.pep:*

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129.971 Million cell updates/sec
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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ALIGNMENTS

RESULT 1 US-09-847-637B-2

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Sequence 2, Application US/09847637B

Patent No. US20020150586A1

GENERAL INFORMATION:

APPLICANT: Naparstek, Yaakov

APPLICANT: Ulmansky, Rina

APPLICANT: Vlmansky, Rina

APPLICANT: WLENTION: NOVEL AMINO ACID SEQUENCES, DNA ENCODING

TITLE OF INVENTION: SEQUENCES AND THE DIFFERENT USES THEREOF

FILLE OF INVENTION: SEQUENCES AND THE DIFFERENT USES THEREOF

FILE REFERENCE: 13125-002001

CURRENT APPLICATION NUMBER: US/09/847,637B

CURRENT FILING DATE: 1999-11-04

PRIOR FILING DATE: 1999-11-05

PRIOR APPLICATION NUMBER: 60/107,213

PRIOR APPLICATION NUMBER: 60/107,213

PRIOR FILING DATE: 1998-11-05

NUMBER: OF OF ONC. 9
RESULT 2
US-09-847-637B-3
; Sequence 3, Application US/09847637B
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; TYPE: PRT
; ORGANISM: Mycobacterium tuberculosis
US-09-847-637B-2
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 2
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PRIOR APPLICATION NUMBER: PCT/IL99/00595
PRIOR FILING DATE: 1999-11-04
PRIOR APPLICATION NUMBER: 60/107,213
PRIOR FILING DATE: 1998-11-05
NUMBER OF SEQ ID NOS: 9
SOPTWARE: PastSEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 16
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Patent No. US20020146414A1
GENERAL INFORMATION:
APPLICANT: Sakiyama-Elbert, Shelly B.
APPLICANT: Hubbell, Jeffrey A.
TITLE OF INVENTION: Controlled Release of No. US20020146414A1-Heparin Binding Growth
TITLE OF INVENTION: Pactors from Heparin Containing Matrices
FILE REFERENCE: ETH 108
FULE REFERENCE: ETH 108
CURRENT APPLICATION NUMBER: US/09/848,664
CURRENT TILING DATE: 2001-05-03
PRIOR APPLICATION NUMBER: 09/298,084
PRIOR FILING DATE: 1999-04-22
NUMBER OF SEQ ID NOS: 31
SOFTWARE: Patentin Ver. 2.1
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Matches
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Best Local Similarity
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APPLICANT: Kashi, Yechezkel
TITLE OF INVENTION: NOVEL AMINO ACID SEQUENCES, DNA ENCODING
TITLE OF INVENTION: THE AMINO ACID SEQUENCES, ANTIBODIES DIRE
TITLE OF INVENTION: SEQUENCES AND THE DIFFERENT USES THEREOF
FILE REFERENCE: 13125-002001
             APPLICANT: Hubbell, Jeffrey A
APPLICANT: Schenne, Jason C
APPLICANT: Sakiyama-zibert, Shelly E
TITLE OF INVENTION: Growth Factor Modified Protein Matrices for Tissue
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TITLE OF INVENTION:
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ORGANISM: Homo sapiens
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Pred. No.
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Sequence 56, Application US/10297229

Publication No. US20030220245A1

GENERAL INFORMATION:
APPLICANT: HUBBELL, Jeffrey A.
APPLICANT: ELBERT, Donald
APPLICANT: ELBERT, Donald
APPLICANT: SCHOENMAKERS, Ronald
TITLE OF INVENTION: CONTROLLED DELIVERY OF PHARMACEUTICALLY
TITLE OF INVENTION: CONTROLLED DELIVERY OF PHARMACEUTICALLY
FILE REFERENCE: 50154/003002
CURRENT APPLICATION NUMBER: US/10/297,229
CURRENT FILING DATE: 2002-10-02
PRIOR APPLICATION NUMBER: PCT/US01/18101
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: Biological Affinity Based Delivery Systems FILE REFERENCE: 9118-0079US CURRENT APPLICATION NUMBER: US/10/405,339 CURRENT FILING DATE: 2003-04-01 PRIOR APPLICATION NUMBER: US 60/369,568 PRIOR FILING DATE: 2002-04-01 NUMBER OF SEQ ID NOS: 60 SOFTWARE: Patentin version 3.1 SEQ ID NO 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PILE REFERENCE: ETH 107 CIP (2)
CURRENT APPLICATION NUMBER: US/10/323,046
CURRENT FILING DATE: 2002-12-17
PRIOR APPLICATION NUMBER: 09/141,153
PRIOR FILING DATE: 1998-08-27
NUMBER OF SEQ ID NOS: 43
SOPTWARE: PATENTIN Ver. 3.1
SEQ ID NO 12
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Publication No. US20030190364A1
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Best Local Similarity
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TYPE: PRT
ORGANISM: Artificial sequence
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TYPE: PRT
TYPE: ORGANISM: Artificial Sequence
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66.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 34; DB Pred. No. 91;
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Pred. No. 91;
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APPLICATION NUMBER: US 09/586,937

PHARMACEUTICALLY ACTIVE COMPOUNDS

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Result
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Maximum Match
Listing first
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Maximum DB
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Perfect score:
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seq length: 16
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48.355 Million cell updates/sec
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1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*
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US-08-452-083-23
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US-08-9217-228-20
US-08-91-954-9
US-08-076-092-56
US-08-076-092-56
US-08-076-092-53
US-08-076-092-486-53
US-08-076-092-49
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US-09-500-124-228
US-09-020-846-38
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                                  Sequence 11, Appl
Sequence 11, Appl
Sequence 12, Appl
Sequence 12, Appl
Sequence 80, Appl
Sequence 228, App
Sequence 228, App
Sequence 33, Appl
Sequence 34, Appl
Sequence 38, Appl
Sequence 38, Appl
Sequence 38, Appl
Sequence 38, Appl
Sequence 37, Appl
Sequence 12, Appl
Sequence 158, Appl
Sequence 158, Appl
Sequence 158, Appl
Sequence 56, Appl
Sequence 56, Appl
Sequence 56, Appl
Sequence 56, Appl
Sequence 57, Appl
Sequence 53, Appl
Sequence 54, Appl
Sequence 53, Appl
Sequence 53, Appl
Sequence 54, Appl
Sequence 53, Appl
Sequence 54, Appl
Sequence 54, Appl
Sequence 55, Appl
Sequence 56, Appl
Sequence 57, Appl
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Sequence
Sequence
Sequence
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INFORMATION:

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	Sequence 36, Appl	Sequence 156, App	Sequence 36, Appl	Sequence 10, Appl	Sequence 36, Appl		Sequence 36, Appl	Patent No. 5248606	Sequence 812, App	Sequence 109, App	Sequence 109, App	Sequence 109, App	Sequence 42, Appl	Sequence 42, Appl	Sequence 237, App		Sequence 49, Appl	Sequence 243, App

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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/467,822
FILING DATE: 06-UNN-1995
CLASSIFICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US 08/447,177
FILING DATE: 19-MX-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/447,177
FILING DATE: 19-MX-1995
CLASSIFICATION: 435
PRIOR APPLICATION: 435
PRIOR APPLICATION: 435
PRIOR APPLICATION: 435
PRIOR DATE: 02-MX-1995
CLASSIFICATION: 435
PRIOR DATE: 02-MX-1995
CLASSIFICATION: 435
                                                TELEFAX: (202) 408-44
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Ferrero, APPLICANT: Thiberge, TITLE OF INVENTION: TITLE OF INVENTION: TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 20005-3315
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Labigne, Agnes
APPLICANT: Sauerbaum, Sebastien
APPLICANT: Ferrero, Richard L.
APPLICANT: Thiberge, Jean-Michel
TITLE OF INVENTION: IMMUNOGENIC COMPOSITIONS AGAINST
SEQUENCE CHARACTERISTICS:
LENGTH: 8 amino acids
                                                                                                      TELEPHONE: (202) 408-4000
                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: Meyers, Kenneth J.
REGISTRATION NUMBER: 25,146
REFERENCE/DOCKET NUMBER: 03495.0137-02000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: 1300 I St.
CITY: Washington
STATE: D.C.
COUNTRY: USA
COUNTRY: USA
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                                                                             (202) 408-4400
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RESULT 3
US-08-466-248-11
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; Sequence 11, Application US/08466248
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                                                                                                                                          Matches
                                                                                                                                                         Query Match
Best Local (
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COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/08/432,697
PILING DATB: 02-MAY-1995
CLASSIFICATION: 424
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                                                                                                                                                                                                                                                                                              TELEPHONE: (202) 408-400
TELEFAX: (202) 408-4400
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                           NAME: Meyers, Kenneth J.
REGISTRATION NUMBER: 25,146
REFERENCE/DOCKET NUMBER: 03495,0137-00000
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE: Dunner
ADDRESSEE: Dunner
1300 I Street, N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                 STRANDEDNESS: single TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                   LENGTH:
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                                                                                                                                        Similarity 6; Conserv
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Ferrero, Richard
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Finnegan, Henderson,
                                                                                                                                                                                                                                                                                                                                               (202) 408-4000
                                                                                                                                                         40.0%;
85.7%;
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85.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            44
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Pred. No. 2.5e+05;
                                                                                                                                                         Score 36; DB 3; Length 8; Pred. No. 2.5e+05;
                                                                                                                                            Mismatches
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TOPOLOGY: linear

MOLECULE TYPE: peptide
US-08-466-248-11
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                                                                                                                                                                                                                             RESULT 4
                                                                                                                                            Sequence 12, Application US/09675922 Patent No. 6468731 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: USA
ZIP: 20005-3315
COMPUTER READABLE PORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: Patentin Release #1.0, Ver
SOFTWARE: Patentin Release #1.0, Ver
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/466,248
FILING DATE: 06-UUN-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/447,177
APPLICATION NUMBER: US 08/447,177
                                                                                                                                                                                                                                                                                                                                                                         Matches
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                 APPLICANT: Hubbell A., Jeffrey
APPLICANT: Schense C., Jason
APPLICANT: Sakiyama B., Shelley
TITLE OF INVENTION: Enzyme-Mediated Modification of Fibrin for Tissue
FILE OF INVENTION: Engineering: Incorporation of Proteins
FILE REPERENCE: ETH 107 DIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: (202) 408-4000
TELEFAX: (202) 408-4400
INFORMATION FOR SEQ ID NO: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: MEYOR'S, KENNETH J.
REGISTRATION NUMBER: 25,146
REFERENCE/DOCKET NUMBER: 034
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 8 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/432,697
FILING DATE: 02-MAY-1995
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
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TYPE: amino acid
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Sauerbaum, Sedact...
Settero, Richard L.
Perrero, Richard L.
Thiberge, Jean-Michel
IMMINGENIC COMPOSITIONS AGAINST
INVENTION: HELICOBACTER INFECTION, POLYPEPTIDES FOR USE IN THE
INVENTION: COMPOSITIONS, AND NUCLEIC ACID SEQUENCES ENCODING SAID
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Biochemistry 14, 947-952, 1975
A;Title: Isolation, characterization, and amino acid sequence A;Reference number: A90393; MUID:75146434; PMID:1125179
A;Accession: A01464
A;Molecule type: protein
A;Residues: 1-13 <LIC>
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C;Species: Mus musculus (house mouse)
C;Date: 02-Unn-1994 #sequence_revision 02-Unn-1994 #text_change 17-Mar-1999
C;Accession: PH1631
                                                                                                                                                                                                                                              C;Superfamily: corticotropin-lipotropin
C;Keywords: acetylated amino end; blocked carboxyl end; hormone; pituitary
F;11/Modified site: acetylated amino end (Ser) (partial) #status experiment.
F;13/Modified site: blocked carboxyl end (Val) (probably amidated) #status
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C;Species: Camelus dromedarius (Arabian camel)
C;Date: 13-Jul-1981 #sequence_revision 13-Jul-1981
C;Accession: A01464
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R;Levinson, D.A.; Campos-Torres, J.; Leder, P.
J. Exp. Med. 178, 317-329, 1993
A;Title: Molecular characterization of transgene-induced immunodeficiency in B-less mic A;Reference number: PH1580; MUID:93301609; PMID:8315387
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A;Residues: 1-15 <LEV>
A;Experimental source: bone
C;Keywords: immunoglobulin
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R;Tao, T.; Bourne, J.C.; Blumenthal, R.M.
J. Bacteariol. 173, 1367-1375, 1991
A;Title: A family of regulatory genes associated with type A;Reference number: 154945; MUID:91139577; PMID:1995588
A;Accession: 154945
                                                                                                                                                                                                        R;Kohama, Y.; Matsumoto, S.; Oka, H.; Teramoto, T.; Okabe, M.; Mimura, T. Biochem. Biophys. Res. Commun. 155, 332-337, 1988
A;Title: Isolation of angiotensin-converting enzyme inhibitor from tuna muscle. A;Reference number: A31570; MUID:88326322; PMID:3415688
                                                                                                                                                                                                                                                                                                         angiotensin-converting enzyme inhibitor - yellowfin tuna
C;Species: Thunnus albacares (yellowfin tuna)
C;Date: 31-Mar-1990 #sequence_revision 31-Mar-1990 #text_change 18-Aug-2000
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A; Accession: A91785
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Keywords: blocked amino end; blocked car; 
Al/Modified site: blocked amino end (Ser);
                                                                                                   Note: the source is designated as Neothunnus macropterus superfamily: unassigned animal peptides
                                                                                                                                                ;Molecule type: prote;Residues: 1-8 <KOH>
                                                                                                                                                                                                                                                                                          Accession: A31570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Species: Escherichia coli
;Date: 07-Jun-1996 #sequence_revision 07-Jun-1996 #text_change 08-Oct-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  :Cross-references: GB:M63619; NID:g147664; PIDN:AAA24555.1; PID:g147665
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Residues: 1-14 <RES>
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  Conservative
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25.3%; Score 22;
100.0%; Pred. No.
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Pred. No. le+03;
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                                                                                    enzyme inhibitor
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  2.8e+05;
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        Status: preliminary;
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Rimicanovic, K., AMJ, Commun. 118, 299-303, 1984
Biochem. Biophys. Res. Commun. 118, 299-303, 1984
A;Title: Purification and sequence of an opioid peptide
A;Title: Purification and sequence of an opiod peptide
A;Title: Purification and sequence opiod peptide
A;
                                                                                                                                                                                                                       enkephalin precursor - sheep (fragment)
C;Species: Ovis orientalis aries, Ovis
C;Date: 20-Jul_1990 #sequence_revision
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Arch. Biochem. Biophys. 278, 168-178, 1990
A;Title: Changes in the amount of cytochrome P450s in rat hepatic microsomes with starv A;Reference number: S09072; MUID:90210577; PMID:2321956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT
S09074
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A;Title: Complete genome sequence of the alkaliphilic bacterium
A;Reference number: A83650; MUID:20512582; PMID:11058132
A;Reference number: A32734; MUID:84128045; A;Accession: A32734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C;Date: 23-Apr-1993 #sequence_revision 23-C;Accession: S09074
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Reference number: A83650; A; Accession: G83988
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                                                                                                                                                 C;Accession: A32734
R;Micanovic, R.; Ray, P.; Kruggel, W.; Lewis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: protein A; Residues: 1-11 < IMA>
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A; Residues: 1-13 <STO>
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Pred. No. 2e+03;
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4.5e+03;
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         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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Gapop 10.0 , Gapext 0.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bahrman N.,
                                                                                                                                                                                                                                              E 2D-GEL THE DETERMINED MW IS: 62 kDa.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Streptophyta; Embryophyta;
.da; Coniferales; Pinaceae;
                                                                                       ų.
                                                                                                         Score 25;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULES)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 25; DB 1;
Pred. No. 3.2e+02
                                                                                                                                                                              29CE44CD51E98FCF CRC64;
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                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Frigerio J.M.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     maritime pine. 1. Mapping assayed on diploid tissue,
                                                                                                                                DB 1;
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                                                                                                           .7e+02;
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                                                                                                                                Length 15;
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                                                                                                                                                                                                                                                                       얶
                                                                                                                                                                                                                                                                                                                                       maritime pine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tracheophyta;
Pinus.
                                                                                                                                                                                                                                                                                                                                                                                   Kremer A.,
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                                                                                                                                                                                                                                                                       THIS UNKNOWN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Angiotensin-converting enzyme inhibitor:
Thumnus albacares (Yellowfin tuna) (Neothunnus macropterus).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neotteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Scombroidei;
Scombridae; Thunnus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   P83147;
28-FEB-2003 (Rel. 41, Created)
28-FEB-2003 (Rel. 41, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation updat
Acharan sulfate lyase 2 (EC 4.2.2.-) (Fragm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kim B.-T., Hong S.-W., Kim W.-S., Kim Y.S., Kim D.-H.; "Purification and characterization of acharan sulfate lyases, novel heparinases, from Bacteroides stercoris HJ-15."; Eur. J. Biochem. 268:2635-2641(2001).
                                                                                                                                                 PIR; A31570;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-NOV-1990 (Rel. 16, Created)
01-NOV-1990 (Rel. 16, Last sequence update)
01-NOV-1990 (Rel. 16, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -!- MISCELLANEOUS: Has an isoelectric point of 8.6.
7.2 and optimum temperature 45 degrees Celsius.
                                                                                                                                                                                                                   muscle.";
Biochem. Biophys.
                                                                                                                                                                                                                                                                                        MEDLINE=88326322; PubMed=3415688;
Kohama Y., Matsumoto S., Oka H., Teramoto T.
"Isolation of angiotensin-converting enzyme
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ,16<u>9</u>81
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-!- SUBUNIT: Monomer.
-!- PTM: The N-terminus is blocked.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=21223019; PubMed=11322884;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bacteroides stercoris.
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ENZYME REGULATION: Inhibited by cupric ion,
Activated by reducing agents, such as DL-di
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13 TNDG 16
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25.3%; or
100.0%; Pr
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Pred. No.
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                                                                                                                                                                                                                                                                      Teramoto T., Okau-
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Listing first 45 summaries
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Query Match Length DB	n DB	ID	Description
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28.7 1	6 2	Q45530	Q45530 bacillus su
28.7 1		д эискэ	O9uck9 homo sapien
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26.4 1	1 15	Q83410	Q83410 mouse mamma
26.4 1	3 15	Q85645	Q85645 mouse mamma
26.4 1	6 2	Q10748	Q10748 clostridium
26.4 1	6 4	Q9UCI8	Q9uci8 homo sapien
26.4 1	6 10	Q9S8D6	Q9s8d6 triticum ae
25.3 1	2 15	Q98Z40	Q98z40 human immun
25.3 1	3 16	Q9K9D7	Q9k9d7 bacillus ha
25.3 1	60	099386	099386 sus scrofa
24.1	8	Q94PX5	Q94px5 felis silve
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Q9s914 hordeum vul	Q9ts39 gorilla gor	Q14462 homo sapien	Q50831 methanococc	human	human	human	Q8qe41 human :	human	human		8 human		Q9nfj0 trypanosoma		P92076 euhadra her	Q9bxx4 homo sapien	P91578 choristone	UT.		Q9mqk6 rupicapra		Q8aup8 salmo trutt	varanus	varanus		Q8sbj0 bacteriopha	Q94vb5 varanus	Q94va7 varanus
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EMBL; AJ006474; CAA07057.1; -
MGD; MGI:88270; Car3.
MGD; MGI:1351477; Car8.
NON TER 10 10
SEQUENCE 10 AA; 1105 MW;
                                                                                                                                                                                                                                                                                                                                                           O70580 PRELIMINARY; PRT; 10 AA.
O70580;
01-AUG-1998 (TYEMBLrel. 07, Created)
01-AUG-1998 (TYEMBLrel. 07, Last sequence update)
01-MG-1998 (TYEMBLrel. 23, Last annotation update)
Carbonic anhydrase III (Fragment).
CAR3 OR CARS OR CA3.
Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
Q45530 PRBLIMINARY; PKT;
Q45530;
01-NOV-1996 (TrEMBLrel, 01, Created)
                                                                                                                                                                                                                                                                                       Sowden J., Smith H., Morrison K., Edwards Y.; "Sequence comparisons and functional studies of the carbonic anhydrase 3 (CA3) gene.";
                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=10090;
                                                                                                    1 MAKEWATP 8
                                                                                                                          3 LEKKWGAP 10
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3; Conserva
                                                                                                                                                 28.7%; milarity 37.5%; Conservative
                                                                                                                                                     Score 25; DB 11; Length 10; Pred. No. 1.5e+03; Indels 2; Mismatches 3; Indels
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RESULT 3
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Matches 5; Conserv
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Q9UCK9;
01-MAY-2000
01-MAY-2000
01-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Baba S., Takahashi T., Kasama T., Shirasawa H.;
"Identification of two novel amyloid A protein subsets
an individual patient of AA-amyloidosis.";
Biochim. Biophys. Acta 1180:195-200(1992).
-!- FUNCTION: MAJOR ACUTE PHASE REACTANT. APOLIPOPROTEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (Human).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; E
Mammalia; Butheria; Primates; Catarrhini; Hominidae;
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
Serum amyloid A isotype 2 alpha protein (Serum amyloid A protein)
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"Mutations that affect the translation efficiency of Tn9-derived cat
gene in Bacillus subtilis.";
Proc. Natl. Acad. Sci. U.S.A. 82:173-177(1985).
-!- FUNCTION: THIS ENZYME IS AN EFFECTOR OF CHLORAMPHENICOL RESISTANCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN=W168; TRANSPOSON=TN9;
MEDLINE=85113144; PubMed=2982142;
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01-MAR-2002
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-!- SIMILARITY: BELONGS TO THE SAA FAMILY
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CATALYTIC ACTIVITY: ACETYL-COA + CHLORAMPHENICOL = COA
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Pred. No. 2.5e+03;
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Bacteria; Proteobacteria; Gammaproteobacteria;
Enterobacteriaceae; Escherichia.
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InterPro; IPR001213; MMTV SAg.
Pfam; PP01054; MMTV SAG; 1.
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J. Bacteriol. 173:1367-1375(1991).
                                                                                                                                                                                                                                                                          SEQUENCE
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MEDLINE=91139577; PubMed=1995588;
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                                                                                                                                                                        Similarity
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                                                               LEKKW 7
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                                                                                                                                 Conservative
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                                                                                                                                                                 Score 23; DB 15;
Pred. No. 3.6e+03;
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Pred. No. 3.2e+03;
                                                                                                                                                                                                                                                                             5E6B080A7326C6D7 CRC64;
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RESULT 6 Q85645 ID Q856 AC Q856

Q85645 Q85645;

PRELIMINARY;

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Result
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Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                                                                                                                                       Score
          protein search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  length: 0 length: 16
                                                                                                                                                                                                                                                     Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A Geneseq 19Jun03:*

1. /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1980.DAT:*

2. /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1981.DAT:*

3. /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1982.DAT:*

4. /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1983.DAT:*

5. /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1984.DAT:*

6. /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1985.DAT:*

6. /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1985.DAT:*

7. /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1985.DAT:*
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80.5
74.7
63.2
55.2
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10: /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1989.DAT:*
11: /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1990.DAT:*
12: /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1990.DAT:*
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14: /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1992.DAT:*
15: /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1993.DAT:*
16: /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1994.DAT:*
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18: /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1996.DAT:*
19: /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1999.DAT:*
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19: /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1999.DAT:*
19: /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA2000.DAT:*
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(c) 1993 - 2003 Compugen Ltd.
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AAU99965
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Mycobacterium tube
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Peptide from libra
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Peptide from libra
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ABG96155	AAW37382	AA026122	AAM00664	AAE34758	AAM48084	AAW38002	AAW56753	ABB97729	ABB97728	AAB45892	ABJ04516	AAW25443	AAR32709	ABG61615	AAW24451	AAW38766	AAE08829	AAY54380	AAB32456	AAY52656	AAY52607	AAY34136	AAW14808	ABG74642	AAB90858	AAU83425	AAU83424	AAU83423	AAU86064	AAR94782	AAW10516	AAR87908	AAW43460	AAE26843	AAW43457	
Cysteine-containin	Hepatitis C virus	Fc region binding	Human protein frag	Streptomyces sp. s	Tie-1 binding surr	domain bindi		Human procathepsin		n tumor-assoc	4 leukaemia	ina	of hae	RP-3	c acid (NA)	ry peptide			Human secreted pro	ncoded o	es en	Variant human pota	s oncogene I	ч	e stimul	fructos	Bacterial fructosy	Bacterial fructosy	Human glucocerebro	Peptide from libra	rrin	ferri	Mycobacteria sp. h	Anabaena variabili	Mycobacteria sp. h	-

ALIGNMENTS

RESULT 1

Amino acid sequence of an epitope of heat shock protein

04-SEP-2000 (first entry)

AAY93330;

AAY93330 standard; peptide; 16

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WPI; 2000-376486/32.
                              Naparstek Y, Ulmansky R,
                                                            05-NOV-1998;
                                                                            04-NOV-1999;
                                                                                            18-MAY-2000.
                                                                                                           WO200027870-A1
                                                                                                                          Mycobacterium tuberculosis
                                                                                                                                         Epitope; heat shock protein 60; Hsp60; vaccine; autoimmune disease; inflammatory disorder; arthritis.
                                             (HADA-) HADASIT MEDICAL RES SERVICES
                                                             98US-0107213.
                                                                            99WO-IL00595
                              Kashi Y;
                                              & DEV.
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Peptide having a defined sequence is used in vaccines for conferring immunity against autoimmune disease or inflammatory disorders, especially arthritis -

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RESULT 2
AAU99965
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Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                The invention relates to backbone cyclised peptide analogues or antagonists of heat shock protein (hsp). The analogues and antagonists are useful in the treatment of chronic inflammatory disease, unformune disease, infectious disease and graft rejection, and for diagnosing autoimmune and inflammatory disease including juvenile rheumatoid arthritis, type I diabetes, multiple sclerosis, systemic lupus erythematosus, inflammatory bowel disease, uveitis, thyroiditis and arteriosclerosis. This sequence represents a backbone cyclised peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present sequence represents an epitope of the heat shock protein 60 (Hsp60) of Mycobacterium tuberculosis. The peptide, and the nucleic acid encoding it, are useful in vaccines for conferring immunity against autoimmune disease or inflammatory disorders, especially arthritis. The peptide may also be used to raise antibodies, which are then used for passive immunisation.
                                                                                                                                                                                                                                                                                   New
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Heat shock protein; hsp; hsp60; chronic inflammatory disease; autoimmune disease; infectious disease; graft rejection; type I diabetes; juvenile rheumatoid arthritis; multiple sclerosis; uveitis; cyclic; systemic lupus erythematosus; inflammatory bowel disease; thyroiditis.
                                                          Sequence
                                                                                       arteriosclerosis. Tanalogue of a heat
                                                                                                                                                                                                                                       Claim 5; Page 42; 50pp; English.
                                                                                                                                                                                                                                                                                                                                            Elias D,
                                                                                                                                                                                                                                                                                                                                                                                                      11-DEC-2000; 2000IL-0140233
                                                                                                                                                                                                                                                                                                                                                                                                                           11-DEC-2001; 2001WO-IL01144.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-JUN-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mycobacterium tuberculosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      arterioscierosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mycobacterium tuberculosis hsp60 backbone cyclised peptide analogue #2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200248312-A2
                                                                                                                                                                                                                                                                                                                                                                         (PEPT-) PEPTOR LTD
                                                                                                                                                                                                                                                                 backbone cyclized peptide analog of heat shock protein useful in treatment of e.g. autoimmune disease \,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VVLEKKWGAPTITNDG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Page 7; 58pp; English
                                                                                                                                                                                                                                                                                                                                          Avron A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16 AA;
                                                          16 AA;
 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                               Senderowitz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%;
100.0%; Score 87;
100.0%; Pred. No.
tive 0; Mismatch
                                                                                       protein.
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Pred.
 Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 87;
No.
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4e-08;
                4e-08;
                           DB 23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
Indels
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 0;
   Gaps
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 0
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RESULT 4
AAR94780
ID AAR9
XX
AC AAR9
XX

AAR94780 standard; peptide; 16 AA.

0

AAR94780;

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AAW43458
IID AAW4
XX AAW4
XX AAW4
XX OB-A
XX MYCC
XX MPI;
PI Elsc
XX (PEI
XX (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
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                                                                                                                        Query Match
Best Local S
Matches 15
                                                                                                                                                                                                                                                                                                                                               This peptide is one of a library (see AAW43451-W43556) which represents the mycobacterial heat shock protein, hsp65 and is designed to study a novel method for the treatment of autoimmune disease e.g. rheumatoid arthritis. This fragment has been allocated as a group 1 peptide which is composed of the fragments found in AAW43451 to AAW43460. Mycobacterial hsp65 is known to be an immunodominant antigen in a number of infectious diseases and is linked to pristane induced arthritis (PIA) in vitro, however heat shock proteins and peptides derived from microbial sources may act as self antigens and thus have limited clinical use. The human hsp65 homologue, hsp58, or fragments of the hsp58 protein (see AAW14948-W14950) may be useful in the development of vaccines for prophylaxis or treatment of an autoimmune disease such as rheumatoid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Heat shock protein; hsp58; autoimmune disease; hsp65; vaccine; rheumatoid arthritis; antigen; infectious disease; prophylactic; pristane induced arthritis; PIA.
                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                       prophylaxis or treatment arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Fig la; 91pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Polypeptide(s) derived from microbial heat shock protein - useful
for treatment of autoimmune disease esp. arthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1997-212851/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Elson CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27-SEP-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-SEP-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           03-APR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO9711966-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mycobacteria sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mycobacteria sp. hsp68 derived peptide (group 1 #8).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08-APR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAW43458;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAW43458 standard; peptide; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (PEPT-) PEPTIDE THERAPEUTIC LTD
   N
                                                               1 VVLEKKWGAPTITND 15
                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VVLEKKWGAPTITNDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VVLEKKWGAPTITNDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Thompson
                                                                                                                                                                                                                                                           16 AA;
                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  96WO-GB02382
                                                                                                                            93.1%; Score 81; DB
100.0%; Pred. No. 4.3
tive 0; Mismatches
      16
                                                                                                                                                                DB 18; I
4.3e-07;
                                                                                                                                                                                               Length 16;
                                                                                                                                         Indels
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ARESULT 5
AAW43459
ID AAW4
AC AAW4
AC AAW4
AC AW6
AC MYCC
XX Heat
KW Prev
KW Prie
KW Prie
XX Synt
OS MyCC
XX WO97
XX WO97
XX O3-J
XX O3-J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAR94773-R94878 are overlapping peptides of a library spanning the whole of microbial hsp65 (heat shock protein 65). Eleven antigens were prepared from the library and used to immunise mice, after 10 days the mice received injections of pristane to induce arthritis and the animals examined for incidence of arthritis. A preferred anti-arthritic peptide was found to correspond to residues 21-31 of full length hsp65 (see AAR94772). Peptides contg. this sequence are used in the diagnosis, treatment and prophylaxis (may be used in a vaccine) of autoimmune diseases such as rheumatoid arthritis.
                                                                                                                                                                                Heat shock protein; hsp58; autoimmune disease; hsp65; vaccine; rheumatoid arthritis; antigen; infectious disease; prophylactic; pristane induced arthritis; PIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Polypeptide derived from bacterial heat shock protein 65 - for use in diagnosis, prophylaxis and treatment of auto-immune disease e.g. rheumatoid arthritis.
                                                                                                                                                                                                                                                               Mycobacteria sp. hsp68 derived peptide (group 1 #9).
                                                                                                                                                                                                                                                                                                           08-APR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 1; Figure 1; 88pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1996-200888/20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Elson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-SEP-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO9610039-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         prophylaxis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hsp; heat shock protein; Mycobacterium bovis; microbial; diagnosis; rheumatoid arthritis; autoimmune disease; treatment; vaccine;
  26-SEP-1996;
                                        03-APR-1997.
                                                                                WO9711966-A1
                                                                                                                                            Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                        AAW43459 standard; peptide; 15 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Peptide from
                                                                                                                       Mycobacteria sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (PEPT-) PEPTIDE THERAPEUTICS LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11-NOV-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VVLEKKWGAPTITND 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VVLEKKWGAPTTND 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Thompson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     library spanning
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   94GB-0019553
  96WO-GB02382.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95WO-GB02295.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                87.4%;
93.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 76; DB
Pred. No. 3.2e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       whole of hsp65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 17;
3.2e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
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RESULT 6
AAR94781
ID AAR9
XX AAR9
XX Pept
XX Pep
XX Pept
XX Pe
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Best Local s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This peptide is one of a library (see AAW43451-W4356) which represents the mycobacterial heat shock protein, hsp65 and is designed to study a novel method for the treatment of autoimmune disease e.g. rheumatoid arthritis. This fragment has been allocated as a group 1 peptide which is composed of the fragments found in AAW43451 to AAW43460. Mycobacterial hsp65 is known to be an immunodominant antigen in a number of infectious diseases and is linked to pristane induced arthritis (PIA) in vitro, however heat shock proteins and peptides derived from microbial sources may act as self antigens and thus have limited clinical use. The human hsp65 homologue, hsp58, or fragments of the hsp58 protein (see AAW14948-W14950) may be useful in the development of vaccines for prophylaxis or treatment of an autoimmune disease such as rheumatoid
                          Polypeptide derived from bacterial heat shock protein 65 - for in diagnosis, prophylaxis and treatment of auto-immune disease rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hsp; heat shock protein; Mycobacterium bovis; microbial; diagnosis;
rheumatoid arthritis; autoimmune disease; treatment; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                  Elson
                                                                                                                                                                                                                                                                                                          27-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                               27-SEP-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                         04-APR-1996.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO9610039-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        prophylaxis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Peptide from library spanning whole of hsp65.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-NOV-1996 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR94781;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR94781 standard; peptide; 15 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Polypeptide(s) derived from microbial heat shock protein - useful for treatment of autoimmune disease esp. arthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1997-212851/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-SEP-1995;
                                                                                                                                           WPI; 1996-200888/20
                                                                                                                                                                                                                                                      (PEPT-) PEPTIDE THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (PEPT-) PEPTIDE THERAPBUTIC LTD
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12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               տ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KKWGAPTITNDG 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KKWGAPTITNDG
                                                                                                                                                                                            Thompson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Thompson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fig la; 91pp; English.
                                                                                                                                                                                                                                                                                                             94GB-0019553
                                                                                                                                                                                                                                                                                                                                                                  95WO-GB02295.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  95GB-0019737
                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                80.5%;
100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12
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                                                                                                                                                                                                                                                         H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 70;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 18; I
3.2e-05;
thes 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>.</u>
                                                          e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
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VVLEKKWGAP 16

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RESULT 7
AAY93329
                                          Best Loc
Matches
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                                                                                    Query Match
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                                                                                                                                                                       immunity against autoimmune disease or inflammatory disorders, especially arthritis. The peptide may also be used to raise antibodies, which are then used for passive immunisation.
                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                               Claim 2; Page 7; 58pp; English.
                                                                                                                                                                                                                                                                                                                                                                            especially arthritis
                                                                                                                                                                                                                                                                                                                                                                                              Peptide having a defined sequence is used in vaccines for conferring immunity against autoimmune disease or inflammatory disorders,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Naparstek Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-NOV-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mycobacterium tuberculosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Epitope; heat shock protein 60; Hsp60; vaccine; autoimmune disease; inflammatory disorder; arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-SEP-2000
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                                                                                                                                                                                                                                            nucleic acid encoding it, are useful in vaccines
                                                                                                                                                                                                                                                            The present sequence represents an epitope of the heat shock protein 60 (Hsp60) of Mycobacterium tuberculosis. The peptide, and the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Amino acid sequence of an epitope of heat shock protein 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAY93329 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 1; Figure 1;
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VVLEXXWGAP 10
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                                                                                                                                 16 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15 AA;
                                            Conservative
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100.0%;
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91.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to backbone cyclised peptide analogues or antagonists of heat shock protein (hsp). The analogues and antagonists are useful in the treatment of chronic inflammatory disease, autoimmune disease, infectious disease and graft rejection, and for diagnosing autoimmune and inflammatory disease including juvenile rheumatoid arthritis, type I diabetes, multiple sclarosis, systemic lupus crythematosus, inflammatory bowel disease, uveitis, thyroiditis and arteriosclerosis. This sequence represents a backbone cyclised peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            autoimmune disease; infectious disease; graft rejection; juvenile rheumatoid arthritis; multiple sclerosis; uveitisystemic lupus erythematosus; inflammatory bowel disease;
Hsp; heat shock protein; Mycobacterium bovis; microbial; diagnosis; rheumatoid arthritis; autoimmune disease; treatment; vaccine;
                                                                                  Peptide from library spanning whole of hsp65.
                                                                                                                                           11-NOV-1996
                                                                                                                                                                                                                                                        AAR94779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New backbone cyclized peptide analog of heat shock protein useful in the treatment of e.g. autoimmune disease \,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-557613/59.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-DEC-2000; 2000IL-0140233.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mycobacterium tuberculosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           arteriosclerosis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mycobacterium tuberculosis hsp60 backbone cyclised peptide analogue #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-OCT-2002
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                 Heat shock protein; hsp58; autoimmune disease; hsp65; vaccine; rheumatoid arthritis; antigen; infectious disease; prophylactic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-APR-1998
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     Elson
                                                                                                        27-SEP-1995;
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                                                                                                                                                                                                                                                                                                                                                                                         pristane induced
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                                                     (PEPT-) PEPTIDE THERAPEUTIC LTD
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  Thompson
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100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                            antigen; :
ritis; PIA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 48;
Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 17;
0.2;
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RESULT 11
AAE26843
ID AAE26
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Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a novel method for the treatment of autoimmune disease e.g. rheumatoid arthritis. This fragment has been allocated as a group 1 peptide which is composed of the fragments found in AAW43451 to AAW43460. Mycobacterial hsp65 is known to be an immunodominant antigen in a number of infectious diseases and is linked to pristane induced arthritis (PIA) in vitro, however heat shock proteins and peptides derived from microbial sources may act as self antigens and thus have limited clinical use. The human hsp65 homologue, hsp68, or fragments of the hsp58 protein (see AAW14948-W14950) may be useful in the development of vaccines for
The present invention relates to novel tocopherol cyclase (2, 3-dimethy: phytylquinol cyclase) proteins and their corresponding polynucleotides. Tocopherol cyclase proteins catalyse the reaction of 2, 3-dimethyl-5-phytyl-1,4-benzoquinol to RRR-gamma-tocopherol. They are involved in the biosynthetic production of tocols, tocopherols or tocotrienols. They are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                        Novel tocopherol cyclase protein, useful for the biotechnological production of vitamin E for use in producing food or feed composi
                                                                                                                                                                                                                                                                                 02-FEB-2001; 2001EP-0102397
                                                                                                                                                                                                                                                                                                                                                                                                                                      Tocopherol cyclase;
tocotrienol; food; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAE26843;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAE26843 standard; peptide; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     prophylaxis or treatment of an autoimmune disease such as rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This peptide is one of a library (see AAW43451-W43556) which the mycobacterial heat shock protein, hsp65 and is designed t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Fig la; 91pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Polypeptide(s) derived from microbial heat shock por treatment of autoimmune disease esp. arthritis
                                                                                           Example 4; Page 31; 61pp; English.
                                                                                                                                                                                      WPI; 2002-666954/71.
                                                                                                                                                                                                                                                                                                                30-JAN-2002; 2002WO-EP00973.
                                                                                                                                                                                                                                                                                                                                               15-AUG-2002.
                                                                                                                                                                                                                                                                                                                                                                             WO200263016-A1.
                                                                                                                                                                                                                                                                                                                                                                                                          Anabaena variabilis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Anabaena variabilis peptide #16 having tocopherol cyclase activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13-DEC-2002
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                                                                                                                                                                                                                                                   (HOFF ) ROCHE VITAMINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7
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                                                                                                                                                                                                                    A,
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                                                                                                                                                                                                                    Friedlein AM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                          feed; vitamin
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                                                                                                                                                                                                                                                    ĄG
                                                                                                                                                                                                                                                                                                                                                                                                                                         3-dimethylphytylquinol
d; vitamin E; enzyme.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      English.
                                                                                                                                                                                                                    Woggon W;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 48;
Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 18;
. 0.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         cyclase; tocol; tocopherol;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
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                                                                3-dimethyl-
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RESULT 12
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             Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                       This peptide is one of a library (see AAW43451-W43556) which represents the mycobacterial heat shock protein, hsp65 and is designed to study a novel method for the treatment of autoimmune disease e.g. rheumatoid arthritis. This fragment has been allocated as a group I peptide which is composed of the fragments found in AAW43451 to AAW43460. Mycobacterial hsp65 is known to be an immunodominant antigen in a number of infectious diseases and is linked to pristane induced arthritis (PIA) in vitro, however heat shock proteins and peptides derived from microbial sources may act as self antigens and thus have limited clinical use. The human
                                                                                                                may act as self antigens and thus have limited clinical use. The human hsp65 homologue, hsp58, or fragments of the hsp58 protein (see AAW14948-W14950) may be useful in the development of vaccines for prophylaxis or treatment of an autoimmune disease such as rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               also useful for the production of a food or feed composition comprising vitamin E. The present sequence is Anabaena variabilis peptide having tocopherol cyclase activity.
                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                            Elson CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Heat shock protein; hsp58; autoimmune disease; hsp65; vaccine; rheumatoid arthritis; antigen; infectious disease; prophylactic; pristane induced arthritis; PIA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                       Disclosure; Fig la; 91pp; English.
                                                                                                                                                                                                                                                                                                                                                  Polypeptide(s) derived from microbial heat shock protein - useful for treatment of autoimmune disease esp. arthritis
                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1997-212851/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-SEP-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-SEP-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             03-APR-1997.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mycobacteria sp. hsp68 derived peptide (group 1 #10).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAW43460 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mycobacteria sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         (PEPT-) PEPTIDE THERAPEUTIC LTD.
10 PTITNDG 16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FGAPQIVNDG 10
                                                                                                                                                                                                                                                                                                                                                                                                                            Thompson JS;
                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15 AA;
                                                                                    16 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           44.8%;
                                          44.8%; Score 39;
100.0%; Pred. No.
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                            0,
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                              Mismatches
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                                          DB 18; Length 16; 7.8;
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AAW10516
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AAR87908
ID AAR87908
XX AAR8
XX AAR8
AC AAR8
XX AAR8
DT 01-M2
XX BOVII
XX AR11
XX AR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                  Synthetic
                                                                                        Lactoferrin; antibacterial; immunogen; monoclonal; antibody; human; bovine; hybridoma; sensitive; specific; detection; determination; gastric juice; intestine; faeces; blood; urine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The sequence is one of six peptides disclosed as having inhibitory effect against viral infection. The peptides are derived from lactoferrin. Their activity is demonstrated against cytomegalovirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 4; Page 2; 10pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1995-144726/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             02-SEP-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bovine lactoferrin (24-39)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-MAR-1996
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                                                                                                                                                                                                                      Lactoferrin derived antibacterial peptide
                                                                                                                                                                                                                                                                                 02-APR-1997
                                                                                                                                                                                                                                                                                                                                                AAW10516;
                                                                                                                                                                                                                                                                                                                                                                                                      AAW10516 standard; peptide; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  peptide having sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Inhibitor against viral
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     02-SEP-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity 7; Conserv
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KKLGAPSIT 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
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    preceded by a peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 40.2%;
77.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     infection and proliferation - contains from lactoferrin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 35; DB
Pred. No. 38;
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RESULT 15
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Best Local :
                    Polypeptide derived from bacterial heat shock protein 65 - for use in diagnosis, prophylaxis and treatment of auto-immune disease e.g. rheumatoid arthritis.
                                                                                            Elson
                                                                                                                                                                                                                                                                  Hsp; heat shock protein; Mycobacterium bovis; microbial; diagnosis; rheumatoid arthritis; autoimmune disease; treatment; vaccine; prophylaxis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present peptide is a lactoferrin (LF) derived antibacterial peptide, which can be used as an immunogen in the prepn. of a monoclonal antibody (MAb), capable of binding with a human or bovine LF fragment but not with natural LF, using standard hybridoma techniques. The MAb can be used for the highly sensitive and specific detection or determination of LF derived antibacterial peptides in gastric juice, intestinal contents, faeces, blood and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Monoclonal antibody combined with bovine or non-natural human lactoferrin fragment - for detecting lactoferrin-originated antibacterial peptide in e.g. gastric juice, urine etc
                                                                                                                                                                                             04-APR-1996.
                                                                                                                                                                                                                     WO9610039-A1
                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                   Peptide from library spanning whole of hsp65.
                                                                                                                                                                                                                                                                                                                                                                       AAR94782;
                                                                                                                                                                                                                                                                                                                                                                                              AAR94782 standard; peptide; 16 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 3; Page 12; 13pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-MAR-1995;
                                                                      WPI; 1996-200888/20
                                                                                                                                            27-SEP-1994;
                                                                                                                                                                   27-SEP-1995;
                                                                                                                                                                                                                                                                                                                                              11-NOV-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1996-515017/51.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-MAR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-OCT-1996.
                                                                                                                    (PEPT-) PEPTIDE THERAPEUTICS LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (MORG ) MORINAGA MILK IND CO LTD.
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Similarity 77.8%;
7; Conservative
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                                                                                          Thompson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16 AA;
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                                                                                                                                            94GB-0019553.
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                                                                                                                                                                   95WO-GB02295.
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Pred. No. 38;
1; Mismatches
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Example 1; Figure 1; 88pp; English

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                                                                   Query Match
Best Local S
Matches 6
                                                                                                                                                                       AAR94773-R94878 are overlapping peptides of a library spanning the whole of microbial hsp65 (heat shock protein 65). Eleven antigens were prepared from the library and used to immunise mice, after 10 days the mice received injections of pristane to induce arthritis and the animals examined for incidence of arthritis. A preferred anti-arthritic peptide was found to correspond to residues 21-31 of full length hsp65 (see AAR94772). Peptides conty this sequence are used in the diagnosis, treatment and prophylaxis (may be used in a vaccine) of autoimmune diseases such as rheumatoid arthritis.
                                                                                                                                          Sequence
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les 6; Conservat
                                  10 PTITNDG 16
н
PTTTNDG 7
                                                                                                                                          16 AA;
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Pred. No.
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Search completed: December 30, 2003, 16:31:43
Job time : 35 secs

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Post-processing: Minimum Match 0%
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seq length: 16
Published Applications AA:*

1: /cgn2_6/prodata/2/pubpaa/US07 PUBCOMB.pep:*

2: /cgn2_6/prodata/2/pubpaa/US06 NEW PUB.pep:*

3: /cgn2_6/prodata/2/pubpaa/US06 NEW PUB.pep:*

4: /cgn2_6/prodata/2/pubpaa/US07 NEW PUB.pep:*

5: /cgn2_6/prodata/2/pubpaa/US07 NEW PUB.pep:*

6: /cgn2_6/prodata/2/pubpaa/US07 NEW PUB.pep:*

7: /cgn2_6/prodata/2/pubpaa/US08 NEW PUB.pep:*

8: /cgn2_6/prodata/2/pubpaa/US08 PUBCOMB.pep:*

9: /cgn2_6/prodata/2/pubpaa/US09B PUBCOMB.pep:*

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14: /cgn2_6/prodata/2/pubpaa/US09B PUBCOMB.pep:*

15: /cgn2_6/prodata/2/pubpaa/US10B PUBCOMB.pep:*

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16: /cgn2_6/prodata/2/pubpaa/US10B PUBCOMB.pep:*

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19: /cgn2_6/prodata/2/pubpaa/US10B PUBCOMB.pep:*

10: /cgn2_6/prodata/2/pubpaa/US10B PUBCOMB.pep:*
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Copyright (c) 1993 - 2003 Compugen Ltd.
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

1121 1132 1133 1144	Result No.
55 32 32 31.5 31.5 31.5 31.5 31.5 31.5	Score 87
	Query Match
16 15 15 15 15 15 15 16 16 17 16 17	Length
110051110011100110011001100110011001100	10
US-09-847-637B-2 US-10-228-167A-3 US-09-753-126-100 US-09-753-126-100 US-09-896-896A-64 US-09-995-587A-34 US-09-995-587A-35 US-09-995-587A-36 US-10-350-405-217 US-10-350-405-217 US-10-350-405-217 US-10-350-301-80 US-09-976-674-61 US-09-976-674-61 US-09-976-674-61 US-09-976-674-61 US-09-976-674-61	ID US-09-847-637B-3
Sequence 2, Appli Sequence 3, Appli Sequence 100, App Sequence 64, Appl Sequence 33, Appl Sequence 34, Appl Sequence 36, Appl Sequence 36, Appl Sequence 5, Appli Sequence 70, Appl Sequence 217, Appl Sequence 70, Appl Sequence 70, Appl Sequence 80, Appl Sequence 81, Appl Sequence 61, Appl Sequence 61, Appl	Description Sequence 3, Appli

RESULT 2 US-09-847-637B-2

Sequence 2, Application US/09847637B

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US-10-426-647-3	9	US-10-213-742-10	US-10-300-699	US-10-235-682-	US-10-193-709	US-10-426-647-7	US-09-828-272A-7		d	US-10-225-567A-1448	US-09-906-393A-3	d		US-10-091-724-			US-09-765-527-237	US-10-138-195-16	US-10-	US-10-125-869A-97	US-10-195-730-253	SD	-SD	US-10-212-628-	US-10-057	US-10-145-415-	US-09-852-455-	US-10-185-050-184	US-10-220-033-40
ω	Ü	10,	46	Sequence 7, Appli	1.5	Sequence 7, Appli	Sequence 7, Appli	Œ	-	14.		455	Sequence 78, Appl	Sequence 8, Appli	e L	, σ	237,	44	103		253		102	227	227	65,	68,		Sequence 40, Appl

ALIGNMENTS

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APPLICANT: Naparstek, Yaakov
APPLICANT: Ulmansky, Rina
APPLICANT: Ulmansky, Rina
APPLICANT: Kashi, Yechezkel
TITLE OF INVENTION: THE AMINO ACID SEQUENCES, DNA ENCODING
TITLE OF INVENTION: SEQUENCES AND THE DIFFERENT USES THEREOF
FILE REFERENCE: 13125-002001
CURRENT APPLICATION NUMBER: US/09/847,637B
CURRENT FILING DATE: 2001-05-02
PRIOR APPLICATION NUMBER: PCT/1199/00595
PRIOR APPLICATION NUMBER: PCT/1199/00595
PRIOR APPLICATION NUMBER: 60/107,213
PRIOR TILING DATE: 1999-11-05
NUMBER OF SEQ ID NOS: 9
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                   ; LENGTH: 16
; TYPE: PRT
; ORGANISM: Mycobacterium tuberculosis
US-09-847-637B-3
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US-09-847-637B-3
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                                                                                   Matches
                                                                                                                         Query Match
                                                                                                       Best Local Similarity
                          1 VVLEKKWGAPTITNDG 16
                                                                                   16; Conservative
1 VVLEKKWGAPTITNDG 16
                                                                                                     100.0%;
                                                                                                     100.0%; Score 87; DB 10; 100.0%; Pred. No. 1.3e-07;
                                                                                   0
                                                                                   Mismatches
                                                                                                                         Length 16;
                                                                                   Indels
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RESULT 4
US-09-753-126-100
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US-10-228-167A-3
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GENERAL INFORMATION:

APPLICANT: Hernan Marshall Gonzalez, Sergio

APPLICANT: Hernan Marshall Gonzalez, Sergio

APPLICANT: HORNING HIGHLY IMMUNOGENIC PROTEIN AGAINST THE INTRACELLULAR PATHOGEN

TITLE OF INVENTION: PISCIRICAGETISIA SALMONIS, WHICH APPECTS SALMON CULTURE, AMINO

TITLE OF INVENTION: ACID SEQUENCES OF SAID PROTEIN AND ITS APPLICATION IN THE DEV

TITLE OF INVENTION: METHODS FOR THE PREVENTION AND DIAGNOSIS OF DISEASES CAUSED I
                                                                                     Sequence 100, Application US/09753126
Patent No. US20020127219A1
GENERAL INFORMATION:
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Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 11
SOFTWARE: PatentIn version 3.1
SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 3, Application US/10228167A Publication No. US20030147909A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT FILING DATE: 2002-08-26
PRIOR APPLICATION NUMBER: Chilean Patent Application No. US20030147909A1 2086-2001
PRIOR FILING DATE: 2001-08-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/847,637B
CURRENT FILING DATE: 2001-05-02
PRIOR APPLICATION NUMBER: PCT/IL99/00595
PRIOR FILING DATE: 1999-11-04
PRIOR APPLICATION NUMBER: 60/107,213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: NOVEL AMINO ACID SEQUENCES, DWA ENCODING
TITLE OF INVENTION: THE AMINO ACID SEQUENCES, ANTIBODIES DIRECTED AGAINST SUCH
TITLE OF INVENTION: SEQUENCES AND THE DIFFERENT USES THEREOF
FILE REFERENCE: 13125-002001
                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 16
TYPE: PRT
ORGANISM: Mycobacterium tuberculosis
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                                                                   APPLICANT: OKKELS, JENS SIGURD
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Piscirickettsia salmonis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PPLICANT: Naparstek, Yaakov
PPLICANT: Ulmansky, Rina
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JENSEN, ANNE DAM
HALKIER, TORBEN
JENSEN, RIKKE BOLDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kashi, Yechezkel
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1; Mismatches (
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                                          US-09-896-896A-64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: MAXYGEN APS
TITLE OF INVENTION: PEPTIDE EXTENDED GLYCOSYLATED POLYPEPTIDES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 64, Application US/09896896A Publication No. US20030036181A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
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                                                                                                                                                                                             SEQ ID NO 64
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Query Match
                                                                                                                                                                                                                                     PRIOR FILING DATE: 2001-02-09
NUMBER OF SEQ ID NOS: 123
                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: DK PA 2000 01092
PRIOR FILING DATE: 2000-07-14
PRIOR APPLICATION NUMBER: PCT/DK00/00743
PRIOR FILING DATE: 2000-11-29
PRIOR APPLICATION NUMBER: PCT/DK01/00090
PRIOR APPLICATION NUMBER: PCT/DK01/00090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/896,896A
CURRENT FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/217,497
PRIOR FILING DATE: 2000-07-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 147
                                                                                                                                                                                                                   SOFTWARE: PatentIn Ver.
                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: US 60/225,558
PRIOR FILING DATE: 2000-08-16
PRIOR APPLICATION NUMBER: DK PA 2000 01027
PRIOR FILING DATE: 2000-06-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: PA 1999 01891 PRIOR FILING DATE: 1999-12-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/753,126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 60/174,652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: IMPROVED LYSOSOMAL ENZYMES AND LYSOSOMAL ENZYME OF INVENTION: ACTIVATORS
TILE REFERENCE: 31-000600US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILE REFERENCE: 0217us210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RIOR APPLICATION NUMBER: PA 200 00865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RIOR FILING DATE:
                                                            OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Artificial Sequence FEATURE:
                                                                                                      ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RIOR APPLICATION NUMBER: 60/210,984
                                                                                                                                                                     LENGTH:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/217,497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity 6; Conserv
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milarity 85.7%;
Conservative
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  36.8%;
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Pred. No. 1.1e+02;
0; Mismatches 1
  Score 32;
    DB 11;
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Title:

Patent No. Sequence

Patent No. 5248606
Sequence 36, Appl
Sequence 455, App
Sequence 455, App
Sequence 10, Appl
Sequence 11, Appl
Sequence 11, Appl
Sequence 11, Appl
Sequence 11, Appl
Sequence 15, Appl

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Minimum
Maximum
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Maximum Match 100%
Listing first 45 s
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score
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       of hits satisfying chosen parameters:
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Match
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87
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1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*
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       GenCore version (c) 1993 - 2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB
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                                   US-08-687-590-67
US-09-289-942A-5
US-09-386-643A-90
US-08-584-043A-80
US-08-602-999A-228
US-08-602-999A-228
US-08-602-999A-228
US-08-687-590-72
US-08-687-597-158
US-08-468-557-12
US-08-565-597-158
US-08-481-924-9
US-08-621-259A-233
US-08-621-259A-233
US-08-621-259A-233
US-08-556-597-155
US-08-621-259A-233
US-08-556-597-155
US-08-621-259A-233
US-08-556-597-155
US-08-621-259A-233
US-08-556-597-155
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                     -08-346-849-23
-08-293-284A-23
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Compugen Ltd
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Sequence 67, Appl
Sequence 70, Appl
Sequence 70, Appl
Sequence 28, Appl
Sequence 218, Appl
Sequence 218, Appl
Sequence 28, Appl
Sequence 31, Appl
Sequence 23, Appl
Sequence 12, Appl
Sequence 12, Appl
Sequence 12, Appl
Sequence 13, Appl
Sequence 9, Appl
Sequence 9, Appl
Sequence 15, Appl
Sequence 15, Appl
Sequence 17, Appl
Sequence 17, Appl
Sequence 23, Appl
Sequence 23, Appl
Sequence 14, Appl
Sequence 145, App
Sequence 152, Appl
Sequence 152, Appl
Sequence 153, Appl
Sequence 153, Appl
Sequence 154, Appl
Sequence 154, Appl
Sequence 157, Appl
Sequence 158, Appl
Sequence 159, Appl
Sequence 159, Appl
Sequence 159, Appl
Sequence 159, Appl
Sequence 231, Appl
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US-08-687-590-67
; Sequence 67, Application
; Patent No. 6255070
                                                                        , MOLECULE TYPE: peptide US-08-687-590-67
 Query Match
Best Local Similarity 100
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent NO. DEFINITION:
GENERAL INFORMATION:
APPLICANT: Willison, Keith Robert
APPLICANT: Kubota, Hiroshi
APPLICANT: Kubota, Hiroshi
APPLICANT: Ashworth, Alan
APPLICANT: Polding Proteins
                                                                                                                                                                                                                                      CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/687,590
FILING DATE: 31-JUL-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/GB95/00192
FILING DATE: 31-JAN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 9401791.0
FILING DATE: 31-JAN-1994
PRIOR APPLICATION NUMBER: GB 9418234.2
                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: 0
INFORMATION FOR SEQ ID NO: 67:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: United States of America COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: FO NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                       NAME: Bastian, Kevin L.
REGISTRATION NUMBER: 34,774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: Two Embarcac
CITY: San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE:
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Two Embarcadero
   36.8%; Score 32; DB
100.0%; Pred. No. 24;
Live 0; Mismatches
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Center, Bighth
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US-07-778-233B-36

US-07-93-3321-36

US-08-290-641-36

US-08-290-641-36

US-08-548-540-36

PCT-US-09-0980-36

US-08-469-260A-455

US-08-449-260A-455

US-08-449-2446-455

US-08-411-399-10

US-08-307-724B-21

US-08-307-724B-21

US-09-615-283-11

US-09-615-283-11

US-08-207-575A-6

US-08-246-115

US-08-246-525-10
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       Indels
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Result No.

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RESULT 3
US-09-336-643A-70
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                                                                                                                            OTHER INFORMATION: Primer IS-09-336-643A-70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: P
SEQ ID NO 5
LENGTH: 9
                                       35.6%;
Best Local Similarity 50.0%;
Matches 5; Conservative
                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS:
SOFTWARE: FastSEQ for
SEQ ID NO 70
LENGTH: 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Pedyczak, Arthur
TITLE OF INVENTION: Fab'-EPITOPE COMPLEX FROM THE HIV-1 CROSS-NEUTRALIZING
TITLE OF INVENTION: MONOCLONAL ANTIBODY 2F5
FILE REFERENCE: 1038-926 MIS:jb
CURRENT APPLICATION NUMBER: US/09/289,942A
CURRENT FILING DATE: 1999-04-13
NUMBER OF SEQ ID NOS: 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 5, Application US/09289942A Patent No. 6482928
                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/116,448
PRIOR FILING DATE: 1999-01-19
PRIOR APPLICATION NUMBER: PCT/US99/03826
PRIOR FILING DATE: 1999-02-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 atent No. 639976:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Pai, Emil F.
APPLICANT: Klein, Michel H.
APPLICANT: Chong, Pele
                                                                                                                                                                            TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                    URRENT APPLICATION NUMBER: US/09/336,643A
URRENT FILING DATE: 1999-06-18
RIOR APPLICATION NUMBER: 60/076,687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PPLICANT: Miller, Andrew P.
PPLICANT: Curran, Mark Edward
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Human immunodeficiency virus type 1
                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PLICANI:
                                                                                                                                                                                                                                                                                                                                                                                                                                               E REFERENCE: SEQ-15P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity 62.
                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1998-08-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION
7 WGAPTITNDG 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                INVENTION: No. 6399761el Human Potassium Channels
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                                                                       Score 31; DB 4; Length 15; Pred. No. 55;
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Pred. No.
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US-08-602-999A-228

GENERAL INFORMATION:

KAY, Brian K SPARKS,

Andrew B

THORN, Judith M.

POWLKES, Dana M. QUILLIAM, Lawrence A. No.

28, Application US/08602999A 6184205

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Query Match
Best Local Similarity
Tatches 5; Conserv:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-584-043A-80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 4
RESULT 5
                                                                                                                                                         US-08-584-043A-80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                           NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: US/08/584,043A
FILING DATE: January 8, 1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE.
                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS LENGTH: 14 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                        MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION: TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Word Perfect 6.1
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PPLICANT:
                                                                                                                                                                                                 STRANDEDNESS:
                                                                                                                                                                                                               LENGTH: 14 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM COMPONERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 633 WEBL 1.
STREET: Suite 4700
                                                                                                                                                                                                                                                                                     TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                              NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE:
                                                                                                                                                                                                                                                                                                    TELEPHONE:
                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER:
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6344436
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                                                                                                Conservative
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633 West Fifth
                                                                                                                                                                                                                                                                                         (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mims, Martha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IBM Compatible
                                                                                                                                                                    peptide
                                                                                                                                                                                                 single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MACROMOLECULE DELIVERY
                                                                                                              34.5%; Score 30; 100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IBM P.C.
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                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                     217/189
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                                                                                                                 DB 4;
. 76;
                                                                                                                             Length 14;
                                                                                                  Indels
                                                                                                  0
                                                                                                  Gaps
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